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UNPROFITABLE ELEVATOR PROPERTY IN NEBRASKA.

The irregular grain buyers who make their appearance in every country market about the time producers commence to market large quantities of grain, the track loaders and the track bidders do much to make the elevator business at country stations unprofitable.

Our May issue contained a number of letters from Nebraska dealers in which the favors shown the man-with-a-scoop were bitterly complained of and one correspondent told of three houses at Brock, Neb., which were kept in idleness by the railroads' discrimination in favor of two track bidders. The scoop-shovel men, having no taxes to pay and being at no expense for warehouse, office, insurance, power, labor or elevator repairs, can sell to the favored track bidders at a price that forbids all competition from elevator owners.

The Missouri Pacific Railway Company encouraged elevator men to invest their money in the building of the three elevators illustrated herewith, and now that they have provided facilities for handling grain in bulk (a thing which should have been done by the carrier) the railroad company turns its back upon them and favors others to the loss of elevator men. If the elevator men would induce the town council to levy a license of \$50 a month upon transient buyers of produce the same as is done in many places to discourage the sharks who go about the country starting stores to sell cheap goods at low prices, the man-with-a-scoop would give them no more trouble and the farmers would have a better market to sell their grain in and deal only with honorable merchants. The elevators are idle or next thing to it and the elevator men are not making anything on what they do ship.

The number of cars of grain shipped from Brock from March 1 to May 24 was 57 cars, of which the Farmers' Elevator Company shipped 10, J. W. Bailey shipped 18, the Duff Grain Company 3, and track loaders 26.

The period covered by this report is not generally one of active shipments, so Brock must be surrounded

by a prolific grain growing territory. All the grain shipped so far this year from Brock has been handled at from $\frac{1}{2}$ to 1 cent margin. One elevator man says: "I could handle my share at those prices, but there is no use of trading dollars and taking the risk of losing where some of them have lost money."

The Duff Grain Company shipped nothing but ear corn which was bought last fall and shelled this spring. As they employ a buyer at that station they probably found the business so unprofitable as to discourage them in making any effort to do business. Mr. Bailey lives at Brock and owns his elevator and shipped more than the Farmers' Elevator Company. But the track loaders shipped nearly as much as all the elevator men put together.

As was pointed out in our May issue it is time the

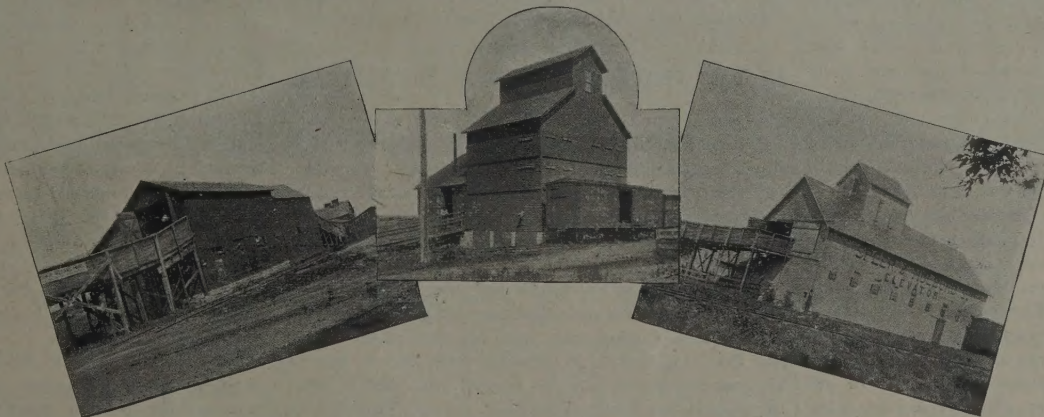
LIABILITY OF RAILROADS FOR DELAY OF FREIGHT BY STRIKES.

BY J. L. ROSENBERGER.

Until within a few years it was almost universally accepted as settled by the common law that, broadly speaking, the existence of a strike or interference of a mob could not be made an excuse for any unusual delay in delivering freight at its destination. And, in some sense, this may still be said to be the general doctrine. A New York decision of thirty-five years ago, has often been cited as indorsing and formally introducing into this country this view, which was first promulgated in England. In the common case of a contract for services, as for building a house, which the builder has been unable to perform because

his workmen have abandoned his service, proof that their conduct was willful and every way unjustifiable, the court says, will not give the party injured an action against them; nor will it excuse the party who has made the contract. Likewise, it declares, if the inability of a railroad to perform a contract of carriage is occasioned by the default of persons for whose conduct it is responsible, it must answer for the consequences.

The Supreme Court of Illinois was, perhaps, the first, in 1876, to turn the current of judicial decision on this subject into a new channel. It took the ground that for delay resulting from a refusal of its employees to do their duty, a railroad is responsible; but for delay resulting solely from the lawless violence of men not in the employ of the road, it is not responsible, even though the men whose violence causes the delay have, but a short time before, been employed by it. Where employees suddenly refuse to work and are discharged, and delay results from a failure to supply promptly their places, such delay, the court says, is attributed to the misconduct of the employees in refusing to do their duty, and this misconduct in such case is to be considered the proximate cause of the delay and the road held responsible accordingly; but when the places of the recalcitrant employees are promptly supplied by other competent men, and the "strikers" then prevent the new employees from doing duty by lawless and irresistible violence, the delay resulting solely



ELEVATORS ON THE MISSOURI PACIFIC AT BROCK, NEBRASKA.

elevator men were making some concerted move to protect their business from these sharks.

Our illustration shows three good country houses that are kept in comparative idleness and made a source of loss by the Missouri Pacific's short-sighted policy. Unless a change is made the houses will be permitted to decay and then the carrier will be called upon by shippers to provide a warehouse for receiving bulk grain for shipment which the laws provide every carrier shall do.

A Manitoba railroad company protects the elevator men who invest their capital in grain storing and handling facilities along its line by refusing to give cars to track loaders. The elevator men have attracted much freight to its line and in justice to them it protects them from the traveling sharks. The roads of this country should be ashamed to do less. But they are not likely to do anything about it until demands are made upon them by the organized grain trade.

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from this cause is not attributable to the misconduct of employes, but arises from the misconduct of persons for whose acts the carrier is in no manner responsible, making a case not to be distinguished in principle from the assault of a mob of strangers.

Much the same position as this has since been taken in the great railroad states of Indiana, New York and Pennsylvania, which is probably sufficient to insure the ultimate triumph of the doctrine throughout all of the states, as fast as the question is raised, or at least with few exceptions.

BELTS BETTER THAN SCREWS FOR CONVEYING GRAIN.

There have probably been as radical changes in the mode of handling grain in large quantities during the last few years, as there has been in the manufacture of flour; and no modern grain warehouse handling grain in considerable quantities is constructed in the same manner as those of but a few years ago. The instore leg and the spiral screw conveyor are things of the past in modern equipments.

Perhaps the results of some experiments as to the efficiency of the screw conveyor and the belt for the horizontal transmission of grain may be of interest. These experiments were made to determine which line of machinery should be adopted in the equipment of Waterloo Dock granaries at Liverpool. These experiments were made some years ago, but the results then obtained are so nearly in accord with the best modern equipments of to-day, that they form a reliable basis to work upon. There is always great difficulty in arriving at actual results, as the equipment of no two plants is the same, and the different arrangement of machinery almost always leaves a factor of uncertainty to be accounted for. These experiments, however, were both made under the most favorable circumstances, and especially constructed to determine the efficiency of the two systems, and may be regarded as the most favorable results attainable by either system.

The first experiment was with a 12-inch screw of 4-inch pitch and 1-inch clearance and running at 60 revolutions per minute, and the result was 225 bushels delivered per hour and a requirement of .04 horse power per foot carried; and the sectional area of grain conveyed was 49 per cent. of the transverse area of the screw. At a higher speed the grain was carried around and not propelled. A 12-inch screw with 12-inch pitch was then tried at 70 revolutions—the most efficient speed in point of economy of power and quantity delivered—and 1,133 bushels per hour was delivered and .125 horse power was consumed per foot traveled, or 37 per cent. less than for the first screw for the same grain delivery. The sectional area of grain carried, when in motion, was 72 per cent. of the area of the screw. Another interesting feature was that the screw with the small pitch moved the grain in a compact body, while the coarser-pitched screw caused it to roll and surge around, and put the grain in much better condition. These experiments clearly demonstrated the impracticability of adopting the screw for the handling of large volumes of grain.

Experiments with belts showed that a speed of 480 feet per minute was the most efficient for handling grains of all kinds. Wheat, however, would easily stand a speed of 540 feet per minute. A 12-inch rubber belt, traveling at 480 feet, carried with ease 1,160 bushels per hour, and an 18-inch rubber belt, at the same speed, delivered 2,320 bushels per hour. The power consumed was .014 (or 1-70) horse power per foot carried. This clearly demonstrated the superiority of belts for the transmission of grains under all ordinary conditions.

Further experiment showed that the amount of power required by different devices to carry 1,000 bushels per hour a distance of 100 feet were: Common screw in stationary case, 18.38-horse power; common tubular screw, 25-horse power; 18-inch common rubber belt, 1.02-horse power.

These experiments clearly demonstrate the superior carrying capacity of belts and their greater efficiency in consumption of power. There is also as great a difference in the cost of maintenance in favor of the belt system. The liability of accidents to operators is also as great in favor of the belt system. The capacity of belts is here underrated, and American practice has

been for an increased speed of fully 20 per cent., which further adds to the efficiency of the belt system of transmission.—A. E. Baxter in the *Northwestern Miller*.

CAUSES OF ELEVATOR FIRES.

We are indebted to *The Chronicle* of New York for the accompanying diagram which was published in its extra number. The diagram itself requires no explanation. The circle is divided into 100 parts, each representing 1 per cent. To ascertain the percentage of fires due to any cause, count the number of per cent. marks in the arc of the segment.

It is to be noted that in reckoning the percentage *The Chronicle* has paid no attention to incendiary or mysterious fires or those whose origin was unknown, nor are "exposure" fires counted. It will be seen that locomotive sparks are the cause of 25 per cent. of the fires, while friction of machinery accounts for 17 per cent. more. Spontaneous combustion accounts

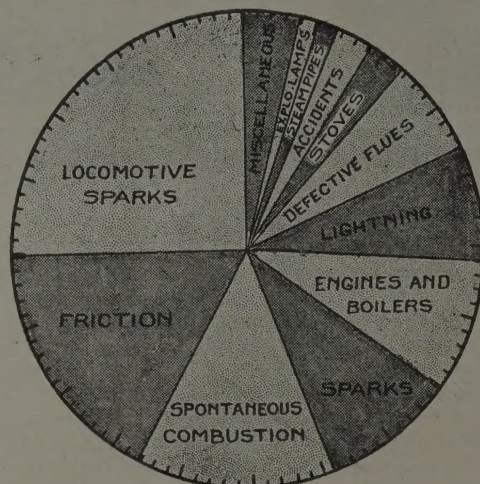


DIAGRAM SHOWING CAUSES OF ELEVATOR FIRES.

for 13 per cent. more; so that over half the fires occur from three causes.

It is curious to note that lightning causes 8 per cent. of the elevator fires. Two or 3 per cent. is the average in other establishments. We have frequently commented on the partiality of lightning for the elevator. The other causes are not particularly noteworthy.

FEED GRINDING AS A BUSINESS.

BY F. RIDDELL.

The fact that the agriculture of our country is slowly but surely changing is one of which none have any clearer conception than those who own country elevators in the West. And to very few does the change mean a more determined fight for a continued existence.

Years ago, when the virgin sod was turned by the cumbrous breaking plow and unwieldy ox team of the early settler, a grain crop was the goal of his hopes; and that crop as soon as threshed must find its way to the nearest station and be turned into cash to meet the obligations incurred during a year of impecunious toil. Under such conditions the owner of the village elevator was one of the mainstays of the community. While he seldom made any pretensions as a banker, he not unfrequently had a good deal of money advanced on the prospective crops of a large number of the settlers.

But over the older settled portion of the great West all that is completely changed. Where two or three elevators contended for the trade, and where lines of teams formerly strung along the streets for nearly half a mile, now one lone survivor may be found, and the number waiting to unload at any one time could not be dignified with the name of "crowd." In the first place, the multiplication and extension of railway systems has caused such a large number of new villages to spring up that the territory which can be reached by any dealer is so honeycombed with competition as to be profitless, while the growth of dairying and fattening of hogs and cattle not only prevents the shipping out of grain, but also frequently necessitates the shipping in instead.

In the earlier years of this change in conditions the

unfortunate grain dealer often tried to save himself by dealing in coal, lumber or agricultural machinery, or by adding a hay press to his plant. But the number of coal and lumber yards which a community can support is limited, so that the limit of change in that direction would seem to be about reached. The very causes which led to the change in the system of farming and fell so heavily on the country elevators offers to many of them a practicable way to, escape from the ill effects of that change. Improved dairying and an improved and extended system of feeding call for grinding of a good deal of the grain to be used for feeding, and shrewd elevator man will arrange to grind all kinds of feed promptly or to ship in bran and shorts or "grano-gluten" to supply his patrons.

It is true some outlay of money will be necessary to do the business properly. The one or two old blind horses will give way to the steam or gas engine of suitable power for the work intended to be done, a roller feed grinder will have to be put in, one or two stands of elevators added, and perhaps some changes will be made in the bins; and likely enough also, a cross conveyor or system of conveyors will be put in to allow receiving to be done on the railway side of the building as well as on the wagon side. In fact, the greatest obstacle to many elevator men's going into the handling and grinding of feed is the idea that their house is so wrong-side-to that a change would be too expensive. Several years ago I was sent for by a man owning an elevator in a small town to look over his building and see if I could fix it so that he could handle bran and shorts without loading them from the car into a wagon and hauling them 'round to his dump. In a few hours' time I laid out a plan and made out a bill of the machinery required, which, when put in, enabled him to shovel his bran directly out of the car into a hopper, and elevate it and then convey it off to a number of bins, which he had not been able to use for that purpose before, on account of the lack of fall in the spout. The cost of the improvement did not exceed \$50, and was within the capacity of his one-blind-horse power, but it saved him a good many dollars in wages as well as a good deal of loss from handling mill feed in windy weather.

In preparing to carry on a business in grinding and handling feed a few dollars judiciously expended in making the whole outfit as convenient as possible will not only allow of the business being carried on with less help, but will also prevent much of the waste incident to chokes, etc. This holds true, also, as to conveniences for delivering, as well as for taking in, of the material handled. While the farmer would be loath to pay 50 cents or \$1 a ton more for feed at a place where it can be got onto his wagon with the least trouble, he can be depended upon to give such a place a decided preference if he can buy as cheaply there, even if he has to drive a few miles further to get there. This may afford a hint to those whose location is against them otherwise, and much may be done to overcome the disadvantages of a place by an increased attention to facilities for loading and unloading.

As to the cost of the machinery needed, so much depends upon the amount of business expected to be done and the present condition of the premises to be used, that no very definite estimate can be made in an article like this. Many elevators already have steam or gasoline engines of various powers, and these can easily be arranged for the work. In many cases, especially if the working capital is limited, it would doubtless be better to confine the capacity of the grinding machine to the power at present in the house, as after the use of his engine for a season or two the dealer would be able to judge better as to the capacity he really needs, and to avoid having on hand machinery too large for his business. Of course if he has been getting along with a horse power it will have to be replaced by an engine of some kind.

While I have had no experience personally with the gasoline engine, I am favorably impressed with its advantages when properly installed, particularly with the readiness with which it may be started to work without long wait to get up steam, and the quickness with which the expense ceases when its work is done. Perhaps if I were better acquainted with gas engines I might tell of drawbacks to their use of which at present I know nothing; but without that disillusion

they seem to me to be the ideal power for a plant of the kind under discussion.

If steam is preferred as a motive power the array of patterns to choose from is almost endless, and the advertising pages of the AMERICAN ELEVATOR AND GRAIN-TRADE will direct the inquirer to a host of manufacturers of both gasoline and steam engines, who will be only too glad of the chance to furnish all the information desired regarding the motors of their manufacture. One advantage of the steam engine over its competitor for these Northern regions is that the working room and office of the building may be kept warm at a small expense during the cold weather, as the exhaust steam would do the heating while the engine is running, while a very small supply of live steam will keep up the temperature at other times.

For grinding purposes probably no one would think nowadays of putting in anything but rolls, although it is doubtful if a properly dressed and carefully managed burr could be beat for the quality of the work done. The greater capacity of the rolls, with their ease of management and ability to run a long time without dressing, undoubtedly make them the most desirable machine for the business. Like engine builders, the makers of rolls are sufficiently numerous to give a wide range of choice as to design, capacity and price, and each one desiring a machine will have to make the choice for himself. But one general

mand and the opportunity offered for expansion and development by the locality, will largely determine the further machinery needed. It is taken for granted that the necessary elevators are put in for convenient handling of the material ground and its proper storage. If desired a buckwheat flouring mill could be cheaply added, as a country community is not generally very fastidious as to the color of its pancakes, provided it is reasonably sure that they are made of genuine stuff. In other directions a man with his eyes open for opportunities would be likely to find room for branching out.

PNEUMATIC GRAIN CONVEYORS.

Through the courtesy of the *Railway Review* of this city we are enabled to present to our readers an illustration of the pneumatic grain conveyors used in loading grain into ocean vessels from the elevators of the Russian state railway at Odessa, the great Black Sea port from which much of the Russian wheat is shipped.

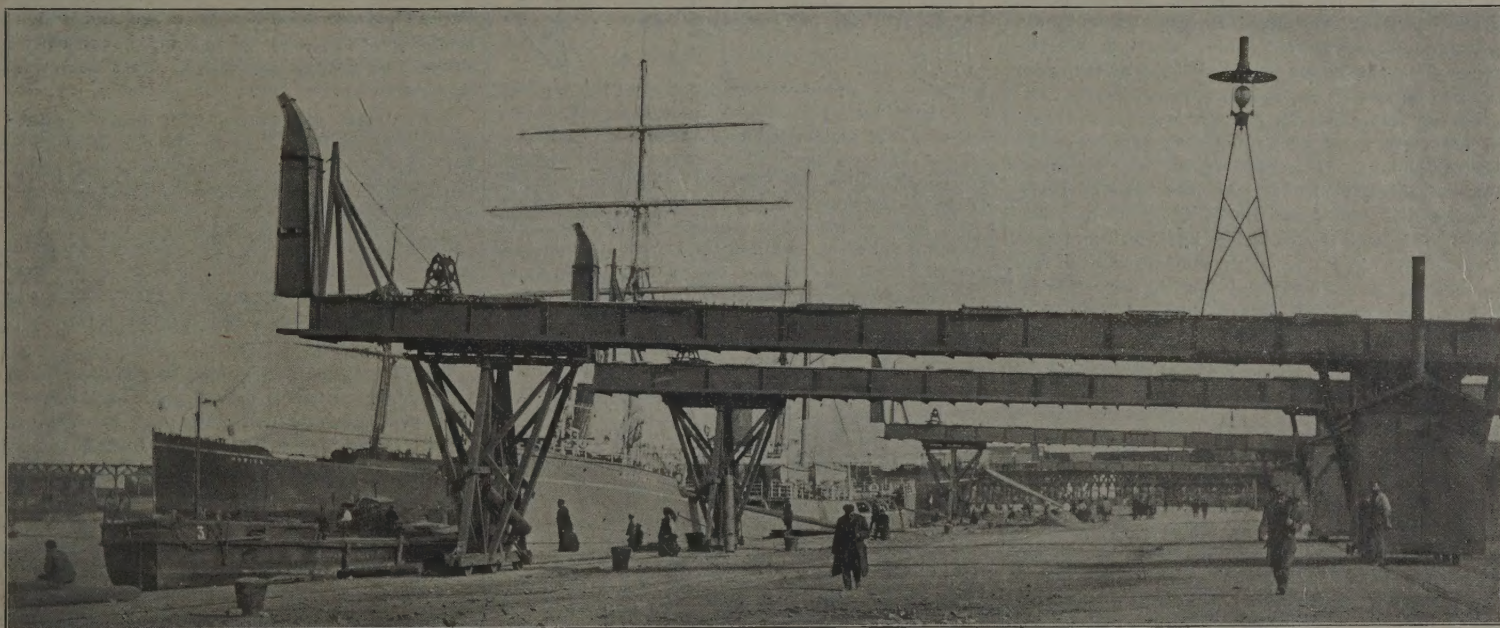
It seems that at Odessa the elevators are built far back from the water's edge, so as to give ample room for handling other freight on the same wharf. This is the plan followed in the building of the state elevators at Braila and Galatz. This plan of setting the storage elevators back from the wharf could be fol-

THE L. S. & M. S. RY. COMPANY'S ELEVATOR SYSTEM.

BY J. A. DEMUTH.

One of the problems of the times in the grain trade is the question of shipping facilities. The method of shipping grain in bulk has become well nigh universal because of the perfected facilities at terminal points which are embodied in the modern elevator. Grain shipped in bags has become nowadays a source of annoyance and extra expense to both shipper and receiver, especially is it so when shipments are in part car lots. The system of grading, storing and reshipping makes the necessity of shipping in bulk imperative. The railroads cannot afford to handle grain in bags when shipments are made in less than carloads because of the expense and delay in switching cars from freight houses where parts of their cargoes must be discharged to elevators where the grain in order to be generally available must be discharged.

In discussing this question there are many shippers who hold that the railroad companies should make no distinction in receiving bulk grain for shipment; that they are in duty bound to provide facilities for receiving and caring for grain in bulk pending actual shipment, as they are in receiving flour, soap or any other commodity. The principle involved is correct, but unfortunately for those who hold their views the rail-



PNEUMATIC GRAIN CONVEYORS AT ODESSA, RUSSIA.

criticism on the subject occurs to me, and that is to look out for one which can be connected to the motive power with as little intervening shafting as possible, as every shaft and bearing not only means increased first cost, but increased running expenses as well. Friction is an ever present source of waste or loss in oil, fuel and power.

The only other essential machine is a cleaner of some kind, so that not only the cobs, straws, etc., may be kept from clogging up the feed hopper, but also that the thousand-and-one things which find their way into the farmer's grain bins may be kept from destroying the rolls. In my pet collection of bric-a-brac, which consists of things sifted out of grist, are to be found horseshoes, cleavices, wrenches, spikes, nails, fence staples, and other things of that kind too numerous to mention, as well as occasional bed sheets, bundles of rags, etc. A grating over the sack dump will strain out some of the larger objects, and a home-made shaking sieve will run off most of the rest; or a rolling screen may be cheaply substituted which will answer fairly well. If much business is expected a regular cleaning machine of some good make will probably be found a good investment.

In localities far from a grist mill a good trade may frequently be built up in cornmeal for family use, the bolting of which may likewise be done on a variety of appliances ranging from a home-made reciprocating sieve up to a regular meal bolt with aspirator.

The room to be used, the amount of capital at com-

lowed with advantage and profit at all points where land is very expensive.

The conveying of grain by means of pneumatic tubes is the best, and it airs the grain and removes much of the dirt and refuse.

There is said to be a movement on foot at Toledo, Ohio, to ask the legislature that that city be authorized to sell \$100,000 of bonds to go into the Bohemian oats business. It is evident that the regular sharks are preparing to work that territory and wish to travel as the city's authorized agents.

Broom corn valued at \$5,431 was exported during May, against an amount valued at \$17,125 exported during May preceding; and during the eleven months ending with May broom corn valued at \$202,516 was exported, against an amount valued at \$149,531 exported during the corresponding months ending with May preceding.

Committees of the Philadelphia Board of Trade have reported that the main cause for the decline of grain exports at Philadelphia is probably the differential of 1 cent per 100 pounds in railroad freight rates in favor of Baltimore. This, directly, "enhances the cost of grain at Philadelphia to that extent compared with Baltimore, and indirectly as it has contributed to build up a larger and more efficient ocean service from Baltimore than Philadelphia, and has been more stimulating to the merchants there than here."

road companies may insist, and reasonably too, on a number of requirements which would result in a precipitous flop, on the part of the shipper, from the frying pan into the fire. In refusing to receive furniture for shipment unless it is satisfactorily crated or burlaped, the railroad company is only taking reasonable precaution against claims for damages. In refusing to receive grain in bulk in less than carloads they are justified by the prospective mix in grades and other sources of loss to the shipper for which he would naturally hold the railroad company responsible. That grain can no longer be profitably shipped and handled in bags is a result of improved elevator facilities at grain centers—a condition of things for which the railroad companies as such are not responsible.

To properly meet these new conditions every railroad station would require a miniature elevator system, inspectors and all. This plan has been tried and is yet in operation on the different branches of the L. S. & M. S. Ry., and also on other roads but on a less extensive scale. While this system is ideal it has its drawbacks to both shipper and railroad company. The only disadvantage the farmer suffers is the minimum of risk which the inspectors assume in grading his grain. There are about eighty elevators in the system controlled or leased by the L. S. & M. S. Ry. with a total capacity of over 1,500,000 bushels. Nearly all of these elevators are operated by the L. S. & M. S. company. Grain is received at these elevators for shipment only; but at near or competitive points it is safe to assume

that either the farmer or the local buyer may take his time in disposing of the grain, no storage being charged if the grain is eventually shipped over this road.

This is a great advantage to farmers and one of which they have not always shown themselves duly appreciative. Before the introduction of a system of duplex checks which the weighman issues, there were discovered a number of instances where the farmer—guileless and down trodden—had so worked on the sympathies of the innocent weighman that the latter out of the kindness of his heart would, now and then, give the farmer a receipt for many more bushels of the golden grain than the farmer had reaped. For a number of years in the history of this system the railroad company were often called upon to pay wheat for outstanding receipts when there was no wheat. This unpleasant state of affairs has been considerably modified since the introduction of the duplex check system, but the above is an illustration of the fact that the general opinion that railroad companies always come out on the top side is erroneous.

At some of these stations the grain is receipted for as red wheat, white wheat, corn, oats or barley, as the case may be. This is because of there being so few buyers that each buyer—not more than two or three—may have bins enough for his use to enable him to take care of the grading himself. In this case if the grain is shipped to Toledo, or elsewhere, the company is not responsible for its inspection. At most of the stations, however, the grain is inspected in by the agent and a receipt given by him which makes the company responsible for the grade fixed by the agent if the shipment goes to Toledo. Otherwise the company is not responsible for grade or weight.

A number of years ago at one of the larger stations weevil was found to have made havoc with a number of bins of beautiful No. 2 Soft Red wheat. Possibly the weevil were in the wheat when the agent receipted for it, and if the farmer knew of it he forgot to mention it. At any rate here were six or seven cars of good wheat and weevils, a mixture that no mixer approves of. The buyer in whose name the farmer took out receipts wanted straight No. 2 Soft Red wheat; so that the company were obliged to sell the weevil wheat in New York where they will buy all sorts of mixtures and pay the buyer the current price for No. 2 Soft.

This does not happen very often. The agents, where grading is done, are furnished samples by the Toledo elevators and it is seldom that there is any difficulty in grades where the grain is consigned to Toledo. The company reserves the right to clean out these grain houses at any time, but usually this is done but once a year and at a time when stocks are low. The agent in charge of the house is first notified that the traveling grain auditor will "cut off" his grain accounts, and after this is done buyers holding grain receipts are given an opportunity to ship their grain to wherever they choose. But if it is not shipped promptly the grain is shipped to Toledo to be held subject to the owner's orders which he gives through the local agent after surrendering his receipts.

All surpluses of grain after all outstanding receipts have been paid is shipped to Toledo for the company's use; but if on cleaning out there is found to be a shortage in any grade the local agent bills the amount and grade short, sending this waybill to the agent at Toledo who pays the shortage out of his surplus grain from other stations. Thus, it is seen, the terminal elevators at Toledo act as a sort of clearing house for this system of grain houses, receiving their surpluses and paying their shorts. Some of these grain houses are almost invariably short and others invariably over. The amounts over or short are usually small and I have never known an agent to be censured for having a shortage unless the amount was unusually large.

[TO BE CONTINUED.]

The Savanna (Ga.) Board of Trade has passed resolutions protesting against the proposed decrease in the duty on rice from 1 cent per pound to $\frac{1}{2}$ of 1 per cent.

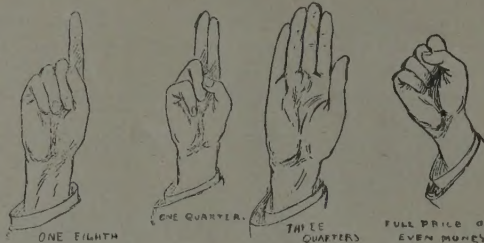
The prospective hay crop is reported to be in a fine condition, and if hay dealers want to maintain a just price for the crop, now is the sunny time to think of organization.

WOULD NOT GRANT A SITE FOR AN ELEVATOR.

John Eiler, our grain buyer, has a head on him as long as a Killdare race course. The railroad company refused to grant him the right to build his elevator on the side track, but gave him the right to load cars from a wagon, so he has built a wagon that will come very near doing the work without the assistance of a man. It is built with a sloping bottom so that the corn runs to an elevator attached near the middle, and all a man has to do is to turn a crank which goes as easy as a grindstone, and the gentleman who runs it says he can put 50 bushels of corn in a car as quick as two men can shovel it. John should get a patent on it.—*Eagle, Sterling, Neb.*

MAKING DEALS ON 'CHANGE BY SIGNS.

Thousands of visitors who yearly go to the Board of Trade and watch the traders on the exchange floor from the public gallery express surprise at the rapid



SIGNS USED ON 'CHANGE.

manner in which business is transacted. As a rule the wheat pit attracts them and they do not understand how commodities change hands with such lightning rapidity, and how hundreds of thousands and millions of bushels are bought and sold in an incredibly short space of time is to the novice a profound mystery. They do not know that the brokers do a great deal of their work by finger signs, seldom understood by the outsider.

It requires only a fraction of a second to buy and sell 50,000 bushels of wheat.

"I'll sell fifty 'Sep' at an eighth," cries one of the brokers, and he has hardly finished speaking before another on the opposite side yells "sold." The trade



SIGNS USED ON 'CHANGE.

is put down on the trading card and the transaction which involves over \$30,000 has been completed.

The number of bushels offered for sale is indicated by holding up one finger for each 5,000 bushels. So in selling 50,000 bushels the broker simply holds up both hands and waves them from him, which explains itself as wanting to dispose of the lot. In addition to this brokers have a complete finger code by which the condition of the market is communicated. The signs generally used are as follows:

The first finger held up stands for $\frac{1}{8}$ of one cent, as the traders all know the main price. If, for instance, the first sale of wheat after the market opened was made at 60 cents and the next at 60 $\frac{1}{8}$ cents, the trader simply holds up one finger for the advance of $\frac{1}{8}$ of one cent. The upward position of the finger is to show the upward course of the market. Should the market be bearish and the price decline to 59 $\frac{1}{8}$ cents, the signal for this would be a closed hand with the thumb

pointing downward. This shows the price $\frac{1}{8}$ of a cent and the status of the market downward. The accompanying cuts show how the signaling is carried on.—*Chicago Tribune.*

SCREENINGS.

"Make anything on the oat deal?" "Ten thousand." "Don't say! Bull or bear?" "Neither."

The earnings of the state grain inspector's department at St. Paul, Minn., for the month of April amounted to \$6,620.12.

The teacher had asked Jimmie Grainer to state the difference between a long ton and a short. Jimmie, observing little boy—"The weight of the driver."

The State Grain Inspection Department at Minneapolis, Minn., has dispensed with the services of 22 men on account of the reduced amount of business to be done.

There is one grain man who does not complain of the hard times. The popcorn concessionaire at the World's Fair acknowledges the corn and says he made enough money out of it to put up a row of flats.

"What I want to know," said the fresh young novice to the "future" man, is this, "is there any money for me in it?" "Oh, yes," answered the speculator, "I've just dropped \$10,000 in it; go right in."

Canadian barley that had been ordered into store at Portland, Maine, about two years ago, and which was intended for shipment to England, has recently been shipped to Eastern townships. That deal was not very profitable.

Barley malt aggregating 4,366 bushels, valued at \$5,013, was imported during the ten months ending with April, against 3,140 bushels, valued at \$3,901, imported during the corresponding months ending with April preceding.

Union and non-union grain trimmers at Chicago, white versus black, are at fisticuffs. Union men say the negroes are underworking them. Two parties met recently near the Board of Trade, to the consternation of the sons of Ham.

The ubiquitous English sparrow is again on deck. Unusual annoyance is looked for from this source in California unless repressive measures are soon inaugurated. It is said that the best way to fight the pest is by the destruction of its nests and young.

A Bourbon county (Ky.) farmer has a field in which he has planted corn for fifty-three years except once, when he planted rye. Each of the fifty-two corn crops are said to have been large yields, but the rye grew so rank that it could not be harvested.

On account of the railroad strike the elevator companies of Hillsboro, N. D., were unable to remove from their elevators an amount of wheat approximating 70,000 bushels; which is calculated to swell the assessment roll of that city to the amount of \$20,000.

Grain shippers of Walla Walla, Wash., are making efforts to secure rates on grain to Portland of .0735 cents per cental. There are 3,000,000 bushel of grain shipped from Walla Walla county annually, and if they secure the rate asked for $\frac{6}{10}$ cents per cental will be saved under present charges.

Custom, like tradition, may arise from necessity and be maintained when it becomes a superfluity. To this day, it is said, dealers in hay and provender in some of the more remote districts of New York cling to the old-fashioned custom of exhibiting a clean sheaf of wheat straw at the door by way of a sign.

Broom corn valued at \$18,340 was exported during April, against an amount valued at \$11,262 exported during April preceding; and during the ten months ending with April broom corn valued at \$197,085 was exported, against an amount valued at \$132,406 exported during the corresponding months ending with April preceding.

Prospective—"Fine weather for corn, hey?" Retrospective—"Well, I don't know 'bout that. There ain't nothing ever certain in the farmin' business except the mortgage. Las' time I remember sich a spell of weather like this cum on I had forty planted in corn, an' I'll be doggone if that there corn didn't grow so fast that it pulled itself up by the ruts and jumped clean over the fence."

NO. V.

KURTZ'S COMBINATION BIN.

KURTZ'S COMBINATION BIN.

John Roberts, a small farmer of Somerby, England, was summoned to appear before the Spittlegate Petty Sessions to answer the charge of sowing poisoned corn on his land. A gamekeeper found some dead birds and a dead fox as a result of his seed. Mr. Roberts pleaded that he did not seek the life of the fox; he had always had a fellow-feeling for the fox—always liked 'em and encouraged their breeding. The learned bench let Mr. Roberts off for £3 15s. 6d. and a warning.

WHERE CORN IS INDIGENOUS.

Dr. John W. Harshberger, in an interesting study on maize, or corn, traces its origin to the highlands of Mexico, between the 21st and 22d degrees of north latitude, from whence it spread through the agency of the tribes of Northern Mexico, and possibly by the way of the West India Islands also, into the area included by the United States. Following down the Isthmus of Panama it extended southward along the great Andean system, where we find tribes in no way related borrowing the name as well as the cereal itself. Maize was not introduced directly into the West India Islands from Mexico, but probably through South America. This is inferred from the fact that South American words designating this grain extended all through the West India Islands. These conclusions in regard to the introduction of this cereal north of Mexico are contrary to the generally accepted idea that the Caribs introduced it into Florida.

THE ECONOMY OF GAS ENGINES.

In a paper read before the Incorporated Institution of Gas Engineers at their recent meeting in London, Mr. Bryan Donkin gave a number of facts as to the extent to which gas engines are used, and the degree of economy they have attained. He said that, according to Mr. Dowson, gas engines for electric lighting, developing about 7,000-horse power, had been sold in England, and Otto engines for 11,000-horse power in Germany. Messrs. Crossley informed him that the number of Otto gas engines in use in England was about 20,000, and he might assume that there were about nearly double this number for all kinds of gas engines.

At "Chateau Lay" an Otto gas engine, feeding about 650 glow lamps, consumed 1.2 pound of fuel per indicated horse power hour for the manufacture of its Dowson gas. At the Chelsea Flour Mill, a 60 nominal horse power twin-cylinder gas motor with Dowson gas, used during a full load test about .87 pound of anthracite and coke per indicated horse power per hour. The engine had a cylinder 17 inches in diameter by 2 feet stroke, and made 156 revolutions per minute. It had been at work about two years. At the Leven Tweed Mills there were, he said, four gas engines with Dowson gas, developing about 200-horse power. These engines used during a six days' test, 1½ pound of anthracite per brake horse power per hour. With coke from the gas works the consumption was 1½ pound per hour.

At Godalming Paper Mills there were gas engines giving 400 indicated horse power, with an average consumption of one pound of fuel per indicated horse power per hour. At a weaving mill in Halifax there were four gas engines of about 200 indicated horse power, using 1.4 pounds of gas coke per horse power per hour. At the Uxbridge Water Works a water-pumping test was made in February, 1892, using generator gas. The consumption was one pound of coal per indicated horse power, or 1½ pounds per horse power of water lifted per hour. The approximate power was 16½ indicated horse power.

The whole of Messrs. Crossley Brothers' large works are driven by gas engines, using Dowson gas, made from anthracite coal. There are eight gas motors from 12 to 30 nominal horse power, indicating collectively about 325-horse power. The firm stated that the consumption was from one pound to 1½ pounds per indicated horse power hour. The net cost to them of the anthracite fuel, labor, interest on capital, and repairs worked out at about 2½ pence per thousand cubic feet. Comparing this with average town gas, and allowing for the difference in thermal value, the equivalent cost would be about 10 pence per thousand cubic feet.

A single-cylinder gas motor, indicating 280-horse power, driving a large flour mill in France, was lately

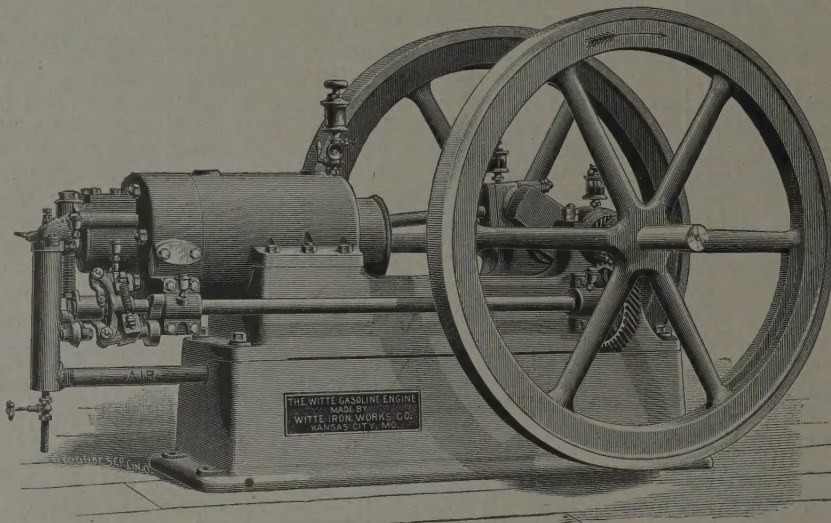
seen by Mr. Donkin working with generator gas from French coal. The preliminary trials gave about ½ pound per indicated horse power per hour. The engine will give a maximum of 320 indicated horse power.

THE WITTE GAS ENGINE.

We present herewith a cut of an improved gas and gasoline engine, recently brought out by the Witte Iron Works Co., which is a combination of all the good features of the well-known Witte Engine, and the many valuable improvements made on it by this company during the four years they have been building it.

The following are a few points of superiority claimed for it: Simplicity, reliability and unusual strength far beyond anything heretofore obtained. All parts, such as cylinder, cylinder head, valves and valve seats, bearings, etc., are duplicates, and can be removed, thereby enabling purchaser to make his own repairs when such become necessary. It has no complicated or hidden parts; every part is shown in the cut. No carburetor or vaporizer, which requires constant adjustment if temperature of engine room changes, and no risk of back explosions or shut-downs. It is made to conform to fire underwriters' specifications in the placing of gasoline tank underground.

It has complete and ample water circulation around all heated parts, insuring no burning off of the lubri-



THE WITTE GAS ENGINE.

cating oils from the cylinder and valve stems and their consequent cutting. The ignition tubes last three days to two weeks, according to usage, and cost four cents each. It is not sold by pound, but is quite heavy and durable. Metal is placed where it belongs.

It is sold on 30 days' trial, with a responsible guarantee against defective workmanship and material used, and protection against any possible infringement suits hereafter. For further information address the sole manufacturers, "Witte Iron Works Co.," Kansas City, Mo.

The expeditious and intelligent handling of hay in shipment receives a serious setback from the fact that great difference in grading exists. It sometimes happens that a shipper consigns hay to one market and has it received as No. 1, consigns it to another market and it is received as No. 2. The grading of hay ought to be uniform.

The British hay trade has for some time back been in a state of total depression. Dealers in London complain that foreign shippers, and especially Canadian, have steadily refused to recognize the requirements of the British market as to baling, marking, etc., and that if such requirements were complied with their shipments would bring a higher price.

Anti-chinch bug associations are bobbing up in Missouri. This is a long-felt want. Opposition to the deadly chinch bug should be carried on with the vigor that ever characterizes a farmers' organization. Let us look for stirring resolutions to the effect that the measly insect must go. If this does not drive them out Secretary Morton must be appealed to.

MUST PAY DUTY ON GRAIN BAGS.

Grain shippers are allowed, under the law, to return jute bags in which grain has been exported, free of duty, if of American manufacture. But it has been found by the authorities that foreign made bags have been sent in under pretense that they were of home manufacture and the duty thus avoided. Such foreign bags should pay a duty of 2 cents per pound, and collectors at San Francisco and New Orleans especially have been instructed to investigate the matter. The collector at New Orleans has corraled about 3,500,000 bags thus far, and is on the lookout for more. It is expected that much trouble will come to grain shippers, who, no doubt, in most cases have been unaware of the imposition practiced upon them.

STORAGE RATES AT FORT WILLIAM, MAN.

During Mr. Van Horne's recent visit to Winnipeg, among other matters the Board of Trade and Grain Exchange deputations which waited on him urged a reduction in the storage rate charged on grain stored in the Canadian Pacific Railway Company's elevators at Fort William. Fort William is the winter storage point for Manitoba grain.

The rate for storage is as follows: Elevating, including twenty days' storage, 1½ cents per bushel. Storage for each succeeding fifteen days, or part thereof, ½ cent per bushel. Grain stored for the winter, after November 15, is charged at the regular rates, until the charge against it accrues to 4 cents per bushel, after which there is no further charge up to June 1. After the latter date the charge is ½ cent for each fifteen days or part thereof, the same as is charged previous to November 1. The winter storage rate, from November 15 to June 1, is therefore 4 cents per bushel. Mr. Van Horne was asked to consider a reduction of this rate to 2 cents per bushel. It was pointed out that such a reduction would encourage farmers to ship their grain to Fort William for winter storage. It would also, doubtless, have the effect of lowering the rate charged in private country elevators throughout Manitoba.

With such a reduction in the cost of carrying, there would perhaps be more disposition to hold wheat in expectation of an advance, instead of marketing in the fall, which is not a feature which it is desirable to encourage as a rule. Still, the advantage from the lower rate would greatly outweigh the disadvantage of any increased tendency on the part of farmers to hold their wheat. It is not complained that the Canadian Pacific Railway rate of storage at Fort William is excessive, as it is about the same as is charged at Chicago and Duluth. Mr. Van Horne promised to consider the matter.—*Winnipeg Commercial*.

E. J. Martz, Weston, Ohio: "If the AMERICAN ELEVATOR AND GRAIN TRADE fills the same position in the grain business that the *American Miller* does in flour, it will indeed be a most valuable paper. Inclosed find \$2.50 for both papers for one year."

Professor Scribner has been engaged as agrostologist by the Agricultural Department. An agrostologist is one who is proficient in the science of grasses. It is not announced that the Russian thistle will be put on the free list to give this officer something to do.

The faith of the Rock Island Railroad in the practicability of "making rain" is shown by the fact that the company maintains at a heavy expense a special department for that purpose, having cars especially fitted up for the accommodation of their operator.

Minnesota farmers, especially those from farms in prairie districts, report that their wheat fields are alive with chinch bugs. The state entomologist has been called to Mankato and has established an infection box for the propagation of the infectious disease.

ONE VIEW OF THE WHEAT MARKET.

There is not a great divergence of opinions as to the future of wheat prices, but some may be overestimating the effect of the harvesting of a large crop. The farmers may refuse to sell. We present herewith an illustration of one view of the conditions prevailing, copies of which are being sent out by Abner L. Backus & Sons.

THE "CHICAGO OF RUSSIA."

The most interesting feature of the International Exhibition of Grain Cleaning Machines at St. Petersburg was the Novo-Rossisk section. This new Black Sea port, although only opened three or four years ago, is fast becoming the principal grain port of Russia. This is due partly to the fact that, unlike the other grain ports, it is not ice bound in the winter,

now is second only in importance as a grain port to Odessa, is one of the most remarkable events in the history of European commerce.—*Pall Mall Gazette*.

THE INTERNATIONAL GRAIN MARKET AT VIENNA.

A recent report from Vienna states that the Anti-Semitic party may be regarded as having put an end to the annual corn market in that city, which attracted some seven or eight thousand wealthy strangers to the town for some weeks at a time. Several corn dealers, it appears, are Jews, and this fact aroused the jealousy of the Anti-Semitic party, who declared that the market was held solely in the interest of the Jews. The result of the dissension has been that the committee of the Corn and Flour Exchange of Vienna, which has charge of the arrangements for holding the market, resolved that it should no longer take place in Vienna, but in some town where the Jews are not

THE ELEVATOR WAR AT BUFFALO.

The elevator war goes on merrily, writes a Buffalo correspondent. It is instructive, as it shows to what foolish ends competition will drive legitimate trade. In the first place the floaters got to cutting each others' throats, and when trade fell off the rate of transferring from vessel to canal boat was down to what you could get, about $\frac{1}{4}$ cent per bushel. This continued peeling of a shaving could not last always, and so the regular elevators took a hand in the fight, scattering the poodles and getting the well-knawed bone.

The campaign was put in the hands of one of the most stubborn elevator owners in the association, and as he has a free hand there can be only one result, the defeat of the floaters and the resumption of a fair and just rate. It may be argued that Tom Ryan, the great ring "buster," is also a notoriously good fighter, but when Tom gets to facing the fact that he cannot



ONE VIEW OF THE WHEAT MARKET.

and partly to its being managed to some extent on the American system. It is commonly spoken of as the "Chicago of Russia," and contains three immense elevators, with a capacity for 3,000,000, 4,760,000 and 3,200,000 puds of grain respectively (one pud = about 36 lbs. av.). Photographs of these buildings and of the harbor piers were shown at the exhibition.

Much of the success of the port is due to the energetic management of the Novo-Rossisk & Vladikavkaz Railway line, which brings the port into communication with the rich grain-producing districts of the Caucasus and connects with lines from other grain-producing districts of Russia. It is anticipated that before long a large amount of grain from Southwestern Siberia and from Central Asia will reach European markets by means of this railway. The line at present carries annually some sixty million puds, and at stations on it eight elevators have been erected for storage and cleaning purposes, each with a capacity for from one to two million puds of grain. All things considered, the growth of Novo-Rossisk, which five years ago was but a sleepy little fishing village, and

systematically insulted by the representatives of the community. The government, however, saw how seriously this would affect the interests of the capital, and a note was sent to the Exchange asking them to reconsider the question, with the result that it has been decided that the market for the present year shall be held in Vienna. A large meeting has, however, been held in Budapest, with the object of attracting the annual market to that or some other of the large Hungarian towns, where visitors would not be subject to the offensive attacks made upon them at the Vienna Exchange. At the meeting it was resolved that in future no Hungarian would do business on the Vienna market. It is estimated that the abstention of the Hungarian corn dealers will cause the town of Vienna a net loss of 1,000,000 florins annually.

The first car of new Kentucky wheat arrived at St. Louis, Mo., June 26. It was Choice No. 2 Red and sold for 60 cents. The first car of new wheat from Kansas was sold the same day. It was No. 2 Red and sold for 58 cents.

transfer grain for nothing and pay a premium for the privilege of doing it, he will wink the other eye.

Some time ago a Chicago commission house sent to New York for a sample of No. 2 Red Winter wheat, which was forwarded with the seal of the inspector attached. Within two hours after its arrival it was changed to another package, and sent back to New York requesting a bid on 200,000 bushels like sample. A reply was received that it could not be used except at $3\frac{1}{2}$ cents discount on New York prices for No. 2 Red.

In the report of the Milwaukee Chamber of Commerce for 1893 it is stated that receipts of barley for that year were 12,000,136 bushels. The receipts of barley at Chicago for 1893 amounted to 13,375,845 bushels. But Milwaukee claims first rank, saying that the receipts at Chicago were largely made up of rail shipments from that and other points in transit to points of consumption, while Milwaukee receipts were mostly consignments to sell in that market.



[We invite correspondence from everyone in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

SECURED A BETTER RATE THAN HIS NEIGHBOR.

Editor American Elevator and Grain Trade:—I see by the June number of the AMERICAN ELEVATOR AND GRAIN TRADE that grain dealers are taking quite an interest in opposing the imposition of a tax for elevator sites on railroad lands.

Mr. Tucker, I notice, is quite a sympathizer with the railroad company, and I suppose he might well be, as his policy was to get a little better rate than his neighbor when he could and then go about working for the railroad company. That is all right; stay by the ship that carries you safe over. But he has gone out of that business now and has come to time. I think he has good sense for doing that. He is rather smarter than the ordinary grain man, for the latter did not know enough to get out of the way. I wish Mr. Tucker good luck; and I would like to be with him.

Yours truly, E. J. EDMONDS.
Marcus, Iowa.

CHARGES AT TOLEDO AND AT CHICAGO.

Editor American Elevator and Grain Trade:—Since the Chicago elevator men are making so much trouble and are trying to rob everyone who has grain pass through their houses by means of skin grade grain we recommend that every shipper who is conveniently situated ship his grain to Toledo, where the terminal charges are very low.

The charge for elevating is ½ cent per bushel, for inspection 30 cents per car, for insurance 10 cents per \$100 if sold on arrival. The commissions are ½ cent per bushel, making the total charges about 1 cent per bushel, not including freight.

When a higher grade of grain can be obtained by cleaning the inspector orders same done. The cost of cleaning is ½ cent per bushel.

No storage is charged on grain unless it has been held more than six days in elevator. After six days ½ cent per bushel for every 10 days or part thereof.

At Chicago only three days' free storage is given to the shipper and the charge for the first ten days' storage is ¼ of a cent. The inspection fee at Chicago is 25 cents a car. The storage rate is too high and the dockage for future shrinkage is simply outrageous.

SHIPPER

STORAGE CHARGES AT TOLEDO.

Editor American Elevator and Grain Trade:—Until further notice, on all sound grain, our elevating charges, including storage for ten days or any part thereof, are one-half of a cent per bushel, and for each succeeding ten days or any part thereof, a storage charge of one-fourth of a cent a bushel. Owing to the prevailing low prices of grain, and wishing to utilize our storage room, we are making the exceedingly low rates for a reasonable amount of grain of grades not below No. 3.

For storage (exclusive of elevating charges) from July 1, 1894, to Dec. 5, 1894, inclusive, the same as the summer rate, except in cases where storage has accumulated, as follows: On and after July 1, 1894, to 3 cents a bushel, Aug. 1, 1894, to 2½ cents a bushel, Sept. 1, 1894, to 2 cents a bushel, Oct. 1, 1894, to 1½ cents a bushel, Nov. 1, 1894, to ½ cent a bushel. After which there will be no further charge until and including Dec. 5, 1894.

For winter storage (exclusive of elevating charges) from July 1, 1894, to April 15, 1895, inclusive, the same as the summer rate, except in cases where storage has accumulated, as follows: On and after July 1, 1894, to 5 cents a bushel, Aug. 1, 1894, to 4½ cents a bushel, Sept. 1, 1894, to 4 cents a bushel, Oct. 1, 1894, to 3½ cents a bushel, Nov. 1, 1894, to 3 cents a bushel,

Dec. 1, 1894, to 2½ cents a bushel. After which there will be no further storage charge until and including April 15, 1895.

I. E. HAVILAND,
Superintendent Toledo & Wabash Elevator Co.,
Toledo, Ohio.

SUEING CONSIGNOR FOR FREIGHT CHARGES.

Editor American Elevator and Grain Trade:—The Missouri Pacific Railroad instituted suit against me for freight charges. I defeated them in the county court and the case has been appealed. It will come up in the District Court this fall.

The facts in the case are as follows: I billed a car of wheat to shippers with the order, "Notify Leftwich, Hodgkins & Co., St. Louis, Mo." I did not sign over bill of lading. The draft on the wheat was paid and the railroad turned it over to the St. Louis firm. About a month later the company failed, and the railroad notified me that the freight on my shipment had not been paid, and that I was being held for it, as the freight bill had been presented on the day before the failure and payment refused.

I would like to know if any of the readers of the AMERICAN ELEVATOR AND GRAIN TRADE have had similar trouble. I present herewith a copy of the bill of lading.

My custom with the Missouri Pacific Railroad was the same as with all other railroads. I pinned the bill of lading to the draft and turned the same over to my banker. The bill of lading says on its face that the goods will be turned over to consignee "on payment of freight charges." I supposed until this case came up that that clause was adhered to.

I can prove that had the railroad company presented its freight bill inside of three weeks it would have been paid. In the first place, they violated the terms of the bill of lading in not demanding the freight on delivery of goods; and in the second place they were very negligent in presenting their freight bill.

It seems that it had been a custom at St. Louis for the railroad to turn freight over to commission houses

and wait awhile—until the elevators had weighed the grain—and then present a correct expense bill. I knew nothing of that custom, however.

Yours, V. E. CHAMBERLIN.
Powell, Neb.

ORGANIZATION OF REGULAR DEALERS.

Editor American Elevator and Grain Trade:—In looking over the various letters from your correspondents in the June issue of the AMERICAN ELEVATOR AND GRAIN TRADE in regard to rentals on railroad lands, I notice one or two of your correspondents especially who seem to have struck the keynote when they said that the country elevator men can only make their demands felt when they do it by concerted action.

If the elevator men want to force their points they will all have to pull together or they will be simply wasting their efforts. If all the legitimate grain dealers in each state will combine together they can and will get justice from the railroads; but they must hang together. If our brother elevator men on other roads are not getting justice, we can each separately see that none of our shipments are routed by way of such lines until the company does the right thing by them.

We have spoken to several of the freight agents of different roads in regard to the excessive losses in weight of our grain in the markets, and they said that if the organized dealers would take the matter up in connection with the various roads, they could compel the buyers in the different markets to accept the railroad weights as final. As it now stands railroad earnings are cut short on their grain shipments probably 2 to 4 per cent. and the shippers' losses in weights are tremendous.

Why is it that we can sell any amount of stuff to the interior on our own certified elevator weights and very seldom have complaints, whereas if we ship to the large markets our cars almost invariably fall short all the way from 5 to 75 and 80 bushels? This is not right, as no such discrepancies should occur. Of

Form 777.

UNION PACIFIC RAILWAY COMPANY.

BILL OF LADING.

No.

..... Powell, Neb. Station Dec. 31 1892

Received of V. E. Chamberlin

the following described freight, in apparent good order, marked and consigned as noted below,

contents and value unknown, to be transported to

(Do not insert point not on this road.)

and delivered at the Railway Depot at that point, on payment of freight charges, together with such charges as shall have been advanced on the same.

This contract, and the responsibilities of the parties thereto, is limited and controlled by the RULES AND REGULATIONS as printed on back hereof, as also by the terms and conditions of the Railway Company's printed tariffs, which are hereby declared to be an essential part of this contract.

It is understood and agreed that the Union Pacific Railway Company assumes no liability beyond the end of its own line, and that, as far as it acts as agent for other parties who participate in the joint transit aforesaid, and parties are separately liable.

THE UNION PACIFIC RAILWAY COMPANY,

ORIGINAL.

By L. L. Marshall Agent.

..... V. E. C. Shipper.

Consignee Shipper's order, notify Leftwich, Hodgkins & Co.

Destination St. Louis, Mo.

(This original bill of lading must be filled out and signed with ink or indelible pencil, and delivered to shipper.)

MARKS	PACKAGES	DESCRIPTION OF ARTICLES	WEIGHTS Subject to Correction.
		Bulk wheat	26,000
O. R. & N.		2,648	

course once in awhile there may be losses in weight caused by bad doors or leaky floors in cars, but in such cases the railroad should make the losses good.

If terminal elevators cannot make enough at the storage rate they are now charging to cover the legitimate shrinkage in grain, let them put up their rates so that they can. It is not right that the shipper should be made to pay for shrinkage by taking overweight, rather let the party who wants to carry the stuff pay storage enough to cover such shrinkage.

If the whole thing was properly put before the regular dealers throughout the country, so that they could see what immense advantages they could get by working in harmony and in unison on the same point at the same time, we venture to say that not one of them would refuse to put his name to the list of members. They would derive a vast benefit by attending all meetings; but if they could not attend they could help along by refusing to ship to parties or over railroads connecting with the road on which the stuff originated as much as possible when they would not respect the rights of the regular dealers.

We do not want to fight the railroads; neither do we want to fight the farmers. We want to see them both prosper as it is just and right that they should; but we do claim that we, also, have our just rights, which should be respected as well as those of others.

We are certainly entitled to a small commission at least, considering the risks we have to run and the amount of capital we have to invest to carry on our business properly. We must have thorough organization for mutual protection. By organizing thoroughly we can protect each other in numerous ways. For instance, if one of our members is running an elevator in a town and a set of scoop-shovelers starts in to do business, the rest of the dealers in the organization will refuse to ship a pound of grain to the commission man or dealer who handles the scoop-shovelers' stuff directly or indirectly. But it will take more than 5 or 10 per cent. of the dealers to force such points effectually. The organization must include all the regular dealers.

Another point in regard to the railroads. Instead of dealers paying rent for their elevator sites on railroad lines, why should not the railroads pay elevator men rent for their property? Who gets the most benefit from property situated on the railroad right of way? The railroads, of course. Then why should they not rent them to facilitate their own business?

The railroads are simply using the Interstate Commerce Law and the Warehouse and Railroad Commissioners' rules to squeeze all the blood out of the shippers that they possibly can. If any outsider buys a lot of grain he gets cars at once; if you who own an elevator buy grain you can wait for cars as long as you have room to hold it, regardless of the heavy losses made by so doing. Dealers, this is not right, and we must see that it is remedied. Cannot your valuable paper start the ball rolling toward organization?

Yours,

ILLINOIS DEALER.

NEBRASKA DEALERS ORGANIZING TO DOWN THE MAN-WITH-A-SCOOP.

Editor American Elevator and Grain Trade:—A meeting of Missouri Pacific grain dealers located north of Nebraska City, Neb., was held at that place June 26 for the purpose of organizing for needed protection. An organization was effected.

The firms of Greenleaf & Baker, Atchison, and Denton Bros., Leavenworth, Kan., have a monopoly of all grain sold by dealers or scalpers on the Missouri Pacific road. No one else is able to buy any grain, and no one is able to sell at prices equal to their bids elsewhere. The complaint against these firms is that while they make strong bids the shortages in weights were very heavy, and that they bid both scalpers and track bidders the same prices, or within $\frac{1}{2}$ cent of the same prices, as the regular dealers were bid for their grain. This compelled regular dealers to pay more for the grain than they could afford.

Both of these firms were interviewed about the matter and they refused to stop sending bids to track buyers. It was the impression of some of the dealers in attendance at the meeting that the Missouri Pacific required these two firms to make bids to track buyers in order to force regular dealers to pay higher prices. This goes to show that the railroad does not care

whether the grain dealers make any money or not. This is general information and applies to all other Missouri Pacific stations in this vicinity.

We notice that complaints are being made about the Illinois Central making charges for sites for elevators, corn cribs, etc. This has always been the case on the Missouri Pacific, from \$4 to \$6 being charged for each site for elevator, corn crib, coal house, etc.

REFORM.

OUR BOSTON LETTER.

Editor American Elevator and Grain Trade:—The strike is the chief factor in the grain business here at present, and has caused prices on grain at Eastern lake ports and on spot to advance about 5 cents per bushel. The country, however, is not inclined to buy very heavily, and there seems to be a large quantity of grain this side of Chicago. Should the strike last much longer this stock will be diminished and we will probably see still higher prices on spot stuff at Eastern junction points. We are having very dry weather in all the New England states except Maine, where the hay crop is expected to be very large.

Receipts and exports for the month of June, 1894, as compared with those of the same time in the preceding year, were as follows:

RECEIPTS FOR JUNE.

Articles.	1894.	1893.
Cotton Seed Meal, tons.....		30
Corn, bushels.....	655,156	697,779
Wheat, bushels.....	184,111	1,062,181
Oats, bushels.....	457,204	619,488
Rye, bushels.....	460	3,930
Mill Feed, tons.....	3,082	2,498
Oatmeal, sacks.....	2,240	1,205
Oatmeal, barrels.....	4,154	1,775
Cornmeal, barrels.....	2,195	11,872
Barley, bushels.....		12,010
Malt, bushels.....	132,594	111,455
Hops, bales.....	280	566
Peas, bushels.....	2,989	1,300
Flour, barrels.....	124,095	94,528
Flour, sacks.....	281,745	225,714
Hay, cars.....	1,832	2,416
Straw, cars.....	133	75

EXPORTS FOR JUNE.

Articles.	1894.	1893.
Wheat, bushels.....	199,230	687,223
Corn, bushels.....	551,167	390,757
Oats, bushels.....	2,397	2,009
Peas, bushels.....		
Barley, bushels.....		
Buckwheat, bushels.....		
Cornmeal, barrels.....	3,235	3,309
Oatmeal, barrels.....	708	460
Oatmeal, sacks.....	3,500	2,190
Flour, barrels.....	233,326	206,378
Flour, sacks.....	38,552	34,876
Mill Feed, bags.....	4,519	3,903
Hay, bales.....	41,944	9,976
Straw, bales.....		

On June 28 Governor Hogg of Texas addressed the members of the Exchange.

Frank W. Ballard, manager of the Northern Supply Company, Burlington Vt., committed suicide at his home at St. Alban's, Vt., June 15.

H. W. Crowell's elevator and mill at Newton, Mass., was demolished June 28 by being struck by loaded coal cars which left the track when being switched by the Boston & Albany Railroad. There was about \$2,000 worth of grain in the building at the time.

The firm of Wilder & Puffer, Springfield, Mass., was dissolved June 30. Mr. Wilder continues the business under the firm name of John W. Wilder.

BUNKER HILL.

GRAIN IN GREECE.

Editor American Elevator and Grain Trade:—Mr. Muhle writes us from Greece as follows:

"Grain is produced in Greece on a very small scale. As in the Peloponnes, the land is cultivated for currants, which article generally pays better than grain. In middle Greece one finds a large plain. North of Athens there is a larger plain which forms a part of Boeotia and of Thocis.

"The grain of these countries is grown for home use only, with the exception of large beans of a quality similar to those of Smyrna, which are sometimes exported at a good profit. In the north of Greece is a larger plain, Thessaly, which is only partially cultivated. Maize, barley and a very good hard wheat are grown there, besides lentils, sesame and large beans.

"There is a somewhat high export duty on grain. Were it not for this it would be possible to export

maize and barley, as they are quoted at about 50 to 50 $\frac{1}{2}$ marks per ton f. o. b. at Volo. Wheat, on the contrary, is dear, bringing about 135 marks per ton. Sesame and beans of any quantity are often exported at a good profit. Until the present time sesame and beans were going only to Marseilles, but lately shipments have been made to Hamburg.

"No doubt a reasonably good export trade of grain from Thessaly could be carried on if the whole country were cultivated; but this has been hindered by the poverty of the inhabitants, who still use rather crude agricultural implements, and who have not the means to buy improved machines. In exportation grain can be transported from the interior by railway to Volo, which is the nearest seaport and which is open the whole year round."

Very truly yours,

MUHLE & HERZ.

Hamburg, Germany.

ELEVATOR AND CANAL RATES AT BUFFALO.

Editor American Elevator and Grain Trade:—A question arises. Now that Captain Du Puy has low elevator charges at Buffalo, why do the Erie Canal boatmen have such a hard time in keeping canal freights up? Freight rates have declined $\frac{1}{2}$ cent instead of going higher. Du Puy has obtained what he wanted, but have his prophecies come true?

On June 25 a meeting of boat men and boat owners on the Erie Canal was held at Buffalo, N. Y., for the purpose of obtaining better and more uniform freight rates on the canal and establishing harmony among those interested. To aid forwarders in raising canal rates, it was decided to accept no orders for the following ten days at less than 3 cents a bushel for wheat and other grain in proportion.

Action was taken whereby all outside canal boat men were recommended for admission to the Buffalo Forwarding Association, and a committee was appointed to apportion 1,000 shares in proportion to the loads of grain shipped by each forwarder during the season of 1893.

UNKNOWN.

A GRAIN ELEVATOR TRUST.

Editor American Elevator and Grain Trade:—The legitimate grain dealers on the Chicago Board of Trade, of which there are about 300 receivers and shippers, have awakened from a long sleep to find themselves in the coils of an elevator combine that has slowly but surely been winding itself about their helpless forms, growing fat upon grain that has fallen into their hands as public warehousemen. Chicago, the largest primary grain market in the world, yields a most fertile and profitable field for the birth of a twin counterpart to the "beef trust," with such able auxiliaries as Kansas City, Buffalo, St. Louis, etc. They form a combination of combinations that not only creates new and dangerous channels of trade, but resists and defies existing laws, defeating the enactment of new ones that in any way conflict with the operations of the trust. In this work they are most ably and efficiently aided by certain railroad interests that are faithful and powerful allies to this "grain trust," both of which shield themselves behind the law creating public warehousemen, which was intended for the protection of grain shipments delivered into their hands as common carriers and public warehousemen, simply as custodians while the property is in transit between producing and consuming markets.

The contention between the Board of Trade and the elevator men rests on a simple, honest condition, viz., that a public warehouseman is created by a law that legalizes and defines his functions as such. It does not permit him to manipulate grain on his own account, or in other words, to stand in the way of a safe and honest handling of the property passing through his hands as custodian. It denies him the right to mix different grades of grain belonging to different owners, yet he does it in direct and positive violation of the letter and spirit of the warehouse law. This policy finds no warrant except the power, the trust and the railroads have acquired by an aggregation of capital and a combination of interests, to ignore individual rights and to go rough shod over established law and commercial usages which always have and always will protect the natural relations existing between the producer and consumer, the intermediate

agencies that have been created and fostered by prudent and wise legislation.

The demands made by a majority of the voting members of the Board of Trade, acting solely in a representative capacity for the actual property received and shipped from the Chicago market that the elevator men shall either stop buying, selling, commingling and mixing grain or surrender their license as public warehousemen, has met with a firm refusal, and the conditions that no house shall be regular under the rules of the Board until its ultimatum shall be complied with, is scorned and repudiated. This is clearly shown by a compact signed by the members composing the Chicago Grain Trust that they will not yield to these demands, at the same time announcing their intention to secede from the Board of Trade in a body and organize what they call a "corn exchange." This threat has been considered more in the light of a bluff than a possible reality; but, be that as it may, two separate and distinct hostile factions have been developed by this controversy; a wide and deep gulf divides them, and in the event the trust carries out its threat to secede from the Board of Trade, we will find a "corn exchange" with as yet no legal existence, and outside of its money power no standing in the trade upon which it can build either a popular or profitable business. The result will be that the Board of Trade will be divested of a fungus growth that has burdened it with unhealthy and excessive speculation, that has blighted its reputation and opportunities as a grain market of high degree.

Among the 300, mostly receivers and shippers, that are struggling for an existence, are found merchants of high rank, sensitive to a strict observance of commercial honor and custom; loyal to their clients and the interests they represent. They are found to-day pleading, and in their desperation demanding the right to exist, which is as strenuously denied them. Thus far all attempts at conciliation have failed; propositions and counter propositions have been made and rejected, and as their differences stand to-day, they are as far as ever from a solution.

The struggling 300 have the law and the right on their side. They are legally and in the eyes of those who understand the issues, right in their position. While they do not represent the combined money power of the trust, they represent what is more, viz., the sentiments of the producer and the consumer who buy and sell the product of the farm in the Chicago markets, and though numerically in the minority on the Board of Trade, they must ultimately be the commanders of the situation when this fight is over. If not we may as well abandon all hope of healthy and stable conditions in what should be the greatest grain market of the world. It is evident that the grain trust sees the alarming conditions that surround them and the dangers of their situation. With a storage capacity of over 32,000,000 bushels of grain and more in sight; representing in value many millions of dollars, the trust may look with most serious apprehension on the outcome of their proposed venture. It is now "in it" for all there is in sight. Failing to get this, how to get out? will be the question for its members to solve. That they have decided to fight their way out in the face of law and public opinion is apparent.

In this fight the struggling 300 have placed the Board of Trade as an organization in a position that it cannot honorably abandon.

The elevator trust has been arraigned before the bar of public opinion and declared irregular in its methods. They have attempted to secure a condonation of their offense by throwing out all kinds of bait to appease their victims, but it is more delusive than seductive. They talk of rebates and even free storage but neither of these gifts are worth the taking, for it is patent to all that under existing methods a warehouseman can afford to give absolutely free storage on grain and yet make millions of dollars annually, despite the fact that for the past eleven years about 50 per cent. of the grain receipts inspected at Chicago has been diverted from the Chicago elevators.

From 1883 to 1893 inclusive, eleven years, the official records show that 2,652,024 cars of grain were inspected by the Chicago Inspection Department, of which 1,360,376 cars were sent to store, leaving a balance of 1,291,648 cars which have been diverted from elevators and sold by sample. This is the strongest

menace the elevator combine have had to overcome. It clearly shows that Chicago is naturally a grain distributing center. The converging and diverging railroads with our lake commerce makes her pre-eminent; and her geographical position will enable her, under proper conditions, to maintain and increase her importance as such.

The accumulation and holding of immense grain stocks at large primary markets for the purpose of earning storage charges and other perquisites for the elevator trust, has been demonstrated to be not only unpopular but depressing and demoralizing in its influence upon values.

Members of the elevator trust have declared war upon the sale of grain by sample. They have truly said, in speaking of our present large stocks, that if it were not for their buying the grain from first hands and forcing it into their elevators it would not come here at all.

No one knows better than the country shipper and the Eastern buyer the character of the gantlet they have to run in marketing grain, even under the most favorable conditions of the present defective system that is forced upon them without remedy or redress.

The flow of grain from the West to East is natural as it is immutable. Intermediate agencies are required in the transportation, handling and sale of this property. A sand-bagging or stand-and-deliver policy on the part of these intermediaries should neither be tolerated nor encouraged. They are entitled to a just and legal consideration for services rendered—no more, no less. Chicago, St. Louis, Buffalo, Kansas City, Peoria, Duluth, etc., belong to this constellation of grain distributing centers and are only way stations between producing and consuming markets. It behooves them to make their local charges as light and their facilities as attractive and effective as possible, divesting themselves as far as possible of the odium that has attached to the elevator system over the entire country.

A miller that requires certain grades and varieties of grain with which to produce certain grades of flour goes into the market and selects from the samples or established grades such as he requires, sends it to his mill and there mixes and manipulates it to suit his purposes. The same rule should apply to a warehouseman who deals in grain and seeks to raise and lower grades from which he expects to derive a profit. There can be no law that will prevent a man from doing what he pleases with his own property, and the law does not restrict him from buying his grain by sample and mixing it to suit his own purposes. But when he takes the property of others and seeks to destroy its identity and its value, when as a public warehouseman he tampers in any way with property over which he has no other jurisdiction than that of a custodian, he invades not only the rights of the public but the individual.

This principle is right, and upon this rock the grain elevator trust must strike in the controversy that is now on between the 300 that are seeking to place every merchant upon an equal footing by enforcing the laws against freight discriminations, unjust tolls and the improper handling of property. The grain elevator trust has driven out the original shippers at country stations, supplanting them with representatives of the trust, who have taken possession of the entire country as buyers and sellers, for the purpose of forcing all farm products through the hands of an unscrupulous combination that can yield no benefit to either producer or consumer. They will continue to fatten and enrich themselves upon the grain that is thus forced through channels of their own creation and control it under the guise of a public warehouseman.

The identity of each and every carload of grain should be preserved as nearly as possible, certainly as it applies to the different grades, while in the hands of the middleman or intermediate agents. Upon the same principle that the grocer or merchant grades and separates his coffee, sugar, cloths, or other merchandise when offering it to jobbers, all charges should be reduced to the minimum and every possible safeguard be provided for securing honest weights and preserving the identity and for expediting the handling of the property.

Means are under consideration by which, under proper conditions, all grain not requiring storage may be transferred and weighed through hopper scales

from cars to vessels for a sum not to exceed one-fourth cent per bushel, for which guaranteed weight certificates will be furnished. The same system is now in use on many of our leading Eastern railroads and has been in successful operation for many years. It has received the indorsement, not only of the Chicago Board of Trade, but buyers and sellers of grain throughout the country.

Here is an alternative for shippers that can be applied for the relief of the grain trade under safe and proper conditions. A member of the grain elevator trust has said that the sale of grain by sample in Chicago "must go." The 300 are standing on solid ground and they need not surrender; they will win this fight if they will only "pull together."

EDWARD S. RICHARDS.

Chicago, July 9, 1894.

NEBRASKA DEALERS MEET AND ORGANIZE.

Grain dealers from points along the lines of the Missouri Pacific and the Burlington & Missouri Railroads in Nebraska met at Nebraska City, Neb., June 26. The convention was called to provide means to prevent commission houses at Kansas City and other points from invading their territory, and to organize for protection against unjust practices of the railroads. About 100 grain men were present.

At this meeting complaints were made of the Missouri Pacific allowing two firms on its line to get a monopoly, or what amounted to a monopoly, on buying grain. It was intimated at the convention that the Missouri Pacific induced these firms to make bids to track loaders in order to compel regular dealers to pay higher prices for grain. This kindness on the part of the railway was resented, and an organization was effected for the purpose of substantially objecting to all such practices.

MIXING WHEAT WITH OATS.

In New York City feed dealers are buying No. 2 Red wheat and mixing 15 per cent. with oats and the horses don't resent it, as yet, although the mules are said to be kicking. But neither have as much to say about what they like or the price for it, as before the substitution of cable for 5,000 car horses in New York the past year, and of trolley for a still larger line in Brooklyn, which has cut down the feed trade of New York City very severely the past year. Yet the demand for feed stuffs for export has more than offset this and enabled the city mills to keep up their mill feed prices between 75 cents and \$1 the whole year, and sold ahead all the time at that.

THE BEAR IS ON TOP.



—From circular of J. F. Zahm & Co., Detroit.

MEETING OF THE ILLINOIS GRAIN DEALERS' ASSOCIATION.

The Illinois Grain Dealers and Protective Association met in its fourth annual convention at Springfield, Ill., June 20. This association has a membership of about 100 grain men. About fifty delegates were present at the session. Discussion in the main related to transportation facilities.

At this meeting the association was reorganized and changed its name. The following officers were elected: Theodore Baxter, Taylorville, president; Ross Hockaday, Oreana, vice-president; Bart Taylor, Decatur, secretary; F. M. Pratt, Decatur, treasurer. An executive committee consisting of the following gentlemen was elected: F. M. Pratt, Theodore Baxter, Bart Taylor, John Crocker, Maroa; J. L. Pumphrey, Heyworth; W. L. Bond, Harriestown; Thomas Costello, Maroa.

The next annual meeting will be held at Decatur.

CULTIVATION OF FLAX IN HOLLAND.

The American Consul at Rotterdam writes: Unfavorable seasons, with consequent inferior quality of crops and unremunerative prices, added to the high taxes and higher ground rents with which suitable flax land is encumbered, have among other causes, of late years, led to a marked decrease of the flax industry in the Netherlands.

The total production of flax in this country from 1889 to 1892, as well as the yield per acre, is shown by the following table:

Year.	Production.		Yield Per Acre.	
	Seed, Bushels.	Fiber, Tons.	Seed, Bushels.	Fiber, Tons.
1889.....	536,570	9,323	12.75	0.221
1890.....	424,507	7,464	10.45	0.18413
1891.....	286,231	5,984	7.92	0.16794
1892.....	275,364	5,172	8.05	0.17182

For the year 1893 no official statistics are yet available, but the figures will no doubt show a further decrease. In the current year, however, an increased acreage has been devoted to flax, and so far the outlook for a good crop is favorable.

As will be seen from the above table, the seed as well as the fiber of the flax plant, is saved and utilized in Holland. The impression which seems to prevail that flax here is cultivated chiefly for its seed is erroneous. Nor does the saving of the seed injure the fiber, if care and skill be exercised.

TRACK SCALES IN KANSAS.

The law enacted last year by the Kansas Legislature requiring the putting in of track scales by the railroads at all stations loading more than a certain number of cars of grain, and which was referred to in these columns at the time, is still the occasion of some friction between shippers and the railroads. It is claimed by the carriers that as relating to interstate shipments such legislation is an interference with interstate commerce, and therefore invalid. There is no doubt abundant reason that a compliance with the law as it now stands is objectionable.

Experience with track scales amply supports the claim of too great a degree of inaccuracy to warrant their use as a means of determining the amount of lading for which a railroad shall be held responsible; but the theory underlying the law is correct and will, sooner or later, find expression in an enactment looking to the issuance of clean bills of lading for grain by rail carriers. Oppose it as they may, this result is inevitable, and if carriers are wise they will arrange to provide for accurately ascertaining the correct weight of bulk grain shipments.

Should such legislation take the form of requiring railways to furnish facilities for handling bulk grain as a part of their station equipment a heavy outlay would be required, but all that is now necessary is the placing in each grain house already constructed an automatic scale so located and protected as to be wholly under the control of the station agent. Such scales which automatically weigh, dump and make a record and which can be made to stop operating when

the desired amount has been loaded, can be had. The cost of equipping the elevators located on the line of any railroad with such scales is inconsiderable compared with the benefits to be gained thereby, and if adopted in advance of legislation will go far toward removing the friction that will otherwise be engendered and undoubtedly prove a great saving of money to the carriers. These scales have passed beyond the experimental stage and both their reliability and durability tested, so there is no longer any reason for waiting for further developments in this line.—*Railway Review*.

Trade Notes.

There is not a legitimate business that cannot be benefited by advertising.

He who will bury his business prospects by refusing to advertise should bury himself and have done with it.

A grain cleaner has been patented by Charles J. Mober, millwright at the Pillsbury Elevator at Minneapolis.

The J. H. & D. Lake Company of Massillon, Ohio, manufacturers of clutch pulleys, has been closed by the sheriff.

The Hicks Gas Engine Company of Cleveland, Ohio, write us that they are having a very good trade and receiving orders every day.

CLEARNESS should always be a feature of an advertisement. The advertisement that cannot be understood at the first reading is seldom reread.

The Jeffrey Mfg. Co., Columbus, Ohio, will erect new works for the purpose of adding to their capacity and enabling them to manufacture general machinery.

A lion was once in an embarrassing situation and a mouse saved him. During hard times it is well to bear in mind that there is a power in even the smallest advertisement intelligently placed.

The Edw. P. Allis Co. of Milwaukee, Wis., has issued a handsome portfolio of engravings showing scenes in their works, scenes of the World's Fair, and views of numerous plants that have been equipped by them.

The Grain Belt Governor Company has been incorporated at Minneapolis with a capital stock of \$10,000. The company will manufacture an alarm device for use on elevator spouts and legs. The incorporators are J. W. Alston, G. H. Warren and J. M. Hazen.

The Weber Gas and Gasoline Company of Kansas City, Mo., write: "We are glad to report a large number of orders on hand, and that we are working full time. The strike, however, is interfering with the business here just at present, as we are unable to make shipments."

Bags and bagging valued at \$1,094,144 were imported during the ten months ending with April, against an amount valued at \$1,107,659 imported during the ten months ending with April, 1893. Burlaps (except for bagging for cotton) valued at \$3,734,183 were imported during the ten months ending with April, against an amount valued at \$4,966,919 imported during the ten months ending with April, 1893.

The roofing manufactured by the Porter Iron Roofing Corrugating Company at Cincinnati, Ohio, is durable and possesses a firm strength of fastening. It is fire, water, wind and lightning proof, and expansion and contraction are well provided for so that all strain on the fastening is avoided. The roofing has had many years of thorough tests in all sections of the country and has given universal satisfaction.

The E. H. Pease Manufacturing Company of Racine, Wis., is still crowded with orders and is working overtime. It was found necessary to remove the offices of the company from the old quarters so as to give more room for the factory. Handsome and pleasant offices have been equipped at the east end of the factory convenient to all parts of the works. A new blacksmith shop will soon be built to provide additional facilities for meeting demands of its growing trade.

Queries and Replies.

Questions and answers are inserted under this head free of charge, and all are invited to avail themselves of this column.

No. 1. Large Gas Engine Wanted.—Will someone give us the names of some manufacturers of good gasoline engines? We want a 50-horse power engine.—J. A. THOMPSON & Co., Edinburg, Ind.

ARGENTINE GRAIN.

Judging from reports from the Argentine Republic the grain that has been shipped from that country is of poor quality, and of that left on hand much is of still poorer quality.

Mr. W. Goodwin, writing from Buenos Ayres under date 18th May, says: Shipments of wheat continue heavy, but there is little new business done and vessels are scarce, although the available supply of wheat in Rosario shows no signs of falling off. Growers are disappointed that the rise in gold is neutralized by bad European markets, and seem to be apathetic.

It is somewhat difficult to speak of condition of wheat remaining, because there is a large amount of good wheat stored in sheds, and at the same time at every railway station there is a great deal of rejected stuff, and immense piles of bags are lying unprotected for want of available coverings of any description.

There has been rain from time to time, with a result that arrivals contain many damp and damaged bags; also there is a fair amount of wheat that has been mixed and rebagged, so that even with the careful selection that is very necessary a proportion of bad grains cannot be avoided, and it is almost inevitable that the average of shipments will fall off somewhat, because there is no home demand to absorb the supply of inferior stuff.

It is impossible to correct the estimates of the total crop at present, because no proper idea can be formed of how much remains on the farms, but there is no doubt that the supply is very large, and that shipments are likely to continue till a new crop is harvested.

Buenos Ayres barletta is only coming forward in sufficient quantity to supply millers for home consumption and Brazil, but it is known that there will be some good wheat for export later on.

There is an export of maize to Brazil, but no indication of export to Europe at present.

Shippers of grain are cautioned to see that cars are cleaned and in good order to deliver without wastage, and to see that the car doors and all openings are carefully sealed.

It is reported that Justice Brewer has reached a decision by which the maximum rate law, which empowers the Nebraska railroad commissioners to establish maximum freight rates, will be found unconstitutional. His stand is taken on the ground that the bill had not been read in full in any of the three stages of its passage through both houses, and for the reason that it does not define the manner in which state courts shall determine whether the rates imposed are confiscatory.

Montreal hay merchants became puzzled to know how some of their competitors could pay good prices for hay and ship it to the United States markets at a profit, and this they found was how it was done: The cars were loaded with hay at both ends and in the middle with straw, so that when the car was examined by customs officers at the boundary line a duty of \$2 per ton on straw was charged. The duty on hay is \$4 per ton; hence the profit of about \$20 to \$24 per carload over more honest shippers.

In a North Dakota Experiment Station bulletin the subject of a rational selection of wheat for seed is discussed. It states that the milling qualities of North Dakota wheat are very fine, but that, due to careless selection of seed and poor methods of saving crops, the wheat is very inferior in the size and appearance of grains. In selecting grain for seed a pure variety, uncontaminated and unimpaired in its capability to germinate, should be taken. The yield from small, light grains is always less than that from the large, heavy variety.



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HARLEY B. MITCHELL, - - - Editor.
CHARLES S. CLARK, - Assistant Editor.

ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., JULY 15, 1894.

THE "ENORMOUS PROFITS" OF THE GRAIN BUSINESS.

For years there has been one long, persistent howl sent up by the political farmers of the Northwest that the grain men were gouging the farmer and robbing him of his grain. The newspaper sheets that live by "farming the farmer" presented figures without stint to show that the grain man was reaping an enormous profit off the grain he bought from the farmer at a starvation price. The figures would read like this: "On Saturday last the grain buyers at Broken Nose refused to give more than 65 cents per bushel for a load of wheat hauled in by John Populus. The same day wheat was selling at Liverpool for \$1.10."

Consequently the grain men were whacking up 45 cents between themselves and the transportation companies. Of course it was never stated that the wheat selling at \$1.10 in Liverpool cost the grain men a great deal more than 65 cents, nor that possibly the grain hauled in by Mr. Populus might have had ten or fifteen pounds of dirt in it. The misguided along with the malignant simply yelled for the state to step in and stop the robbery. They wanted this, that and the other thing to right the wrong and give the farmer a chance at the Liverpool price.

For the past two years the Minnesota Railroad and Warehouse Commissioners have been keeping the public informed in regard to the comparative prices of wheat at Duluth and Liverpool at a given date. They have taken actual figures of cargoes, followed the wheat from Duluth to Liverpool and published the result of actual transactions. For a year, and a year of depressed prices too, we have heard but little of the old cry as to the robbery of the farmer by the grain man. It is no doubt due to the fact that the actual figures have been brought home to the understanding of the misinformed and he has seen that the profits of the grain trade are largely mythical, and in no event commensurate with the risk and service.

One of the latest reports we have seen from the Minnesota commissioners shows a profit on

the exportation of $\frac{3}{4}$ of a cent a bushel. The same transaction based on the highest price at Duluth during June would have netted a loss of nearly two cents a bushel. Based on the lowest price in Duluth for June, it would have netted a profit of over five cents a bushel, which would have been handsome. Based on the average price, the profit would have been $1\frac{1}{2}$ cents per bushel. We think that the most unreasonable mind must admit that this margin of profit is quite small enough. Anyone who thinks the reward large for advancing money on grain will find the field open to all.

THE COUNTRY GRAIN DEALER AS AN ADVERTISER.

Not every country grain dealer advertises his business, but there are a number who advertise persistently and judiciously and find that it pays well. Some advertise "good milling wheat, corn and oats" in milling journals and sell direct to millers. They get paid for every pound shipped and are not forced to bear the loss which may be caused by shrinkage while the grain is earning storage charges for terminal elevator men. The miller, too, is willing to pay a premium for choice milling wheat.

Many country dealers have profited by advertising for the farmers' produce and giving the ruling price for every article which they desire to buy. The farmer is just as anxious to know of the changes in the market value of any grain he may have on hand as is the country elevator man, and he is sure to take his grain to the market of the buyer who keeps him posted on prices. The weekly market report published in the local paper makes the farmer familiar with the names of the buyers in that market, and they feel better acquainted with the buyers and have more confidence in them.

One Iowa buyer attracts grain from neighboring towns by advertising high prices for grains of which he knows the farmers have very little. He pays the prices, gets acquainted with the farmers from a distance and induces them to sell him all their other grain at a fair price.

Advertising gives the regular dealer a standing with the farmers that the man-with-a-scoop cannot get.

THE CANAL REVIVAL.

This journal has always been a strenuous advocate of the maintenance of waterways as regulators of railway rates, and it abates no portion of its opinions on this subject. But the advocates of canals are overdoing the subject just now, and the canals now projected would almost bankrupt the nation. A canal should have some other purpose than the mere connection of two bodies of water. Just because a canal project presents no great engineering problem is no reason why it should be constructed. The substantial business aspects of the case should be weighed before the public is put to the expense of construction merely to assuage the canal fever. Many of the projects now under consideration would be abandoned at once if tested by the criterion of their value to the commerce of the country.

First, we may note the Chesapeake and Delaware Canal, in which Baltimore is taking a lively interest. North of it is the proposed ship canal across New Jersey from Raritan Bay to Philadelphia. Over in Massachusetts the Cape Cod Canal scheme is being agitated for the tenth time. The project of cutting a canal through Florida has apparently been abandoned; at least nothing has been said about it for some time.

The canal schemes having the Great Lakes as a part of the plan are numerous and some of them of almost amazing audacity. One of the chief of these is to connect the Hudson River with the lakes, for which \$50,000 has been appropriated by the House Committee on Railways and Canals to make surveys. The routes proposed are

by the Erie Canal and by Lake Ontario and the Oswego and Mohawk valleys. Of course this latter route would necessitate another canal around Niagara Falls on the American side. Then there is the Lake Erie and Ohio Canal, for which a \$20,000 survey appropriation has been recommended. This canal would run from Cleveland to the Ohio river. The sum of \$10,000 has been appropriated to survey a route from Lake Superior to the Mississippi in the vicinity of St. Paul and Minneapolis. Still another bold project is a canal across lower Michigan from Lake Michigan to Lake Erie.

Of all the projects only one is being carried out, the ship canal from Chicago to the Mississippi valley. This is being hurried along to completion at a rate characteristic of Chicago, though it is attracting but little attention. It is a huge engineering feat which will require three or four years more for completion.

Most of these canals would not pay. The great Manchester Canal has proved a great disappointment and yet it promised well. It will be best if most of the American projects never get beyond the survey period. A useless canal gives a black eye to all waterway projects, good, bad and indifferent.

RAILROAD ELEVATORS AND INSURANCE.

The suggestion has been freely made since the trouble between the Board of Trade and the elevators that the railroad companies should assume the management of grain elevators in Chicago as a part of their terminal arrangements. It has been argued that the railways would do the business in a manner satisfactory to all concerned.

This question has come up more than once in the past. The scheme involves railroad control, but hardly railroad ownership. The railways do not care either to own or operate elevators. When it has built them as a part of its terminal arrangements, it has very generally leased them to other parties. But it appears that the insurance question is the insurmountable obstacle to railway management of public elevators. Should the railways merely manage the public elevators in the interests of the public, they would have no insurable interest in them. This same obstacle presented itself when the question of turning the elevators over to the railways was agitated some years ago, and the insurance people could suggest no way out of the difficulty.

ORGANIZATION FOR THE GRAIN TRADE.

In this number will be found an excellent communication from an "Illinois Dealer" on the subject of organization. He has been identified with different organizations and knows whereof he writes. We trust every reader will peruse his remarks on the subject.

Organization has recently found new friends in the grain trade and renewed efforts are being made to accomplish something in this line. The Illinois Grain Dealers' Association has been reorganized, Nebraska dealers have organized a local association, and the grain dealers of Butler county, Ohio, have done likewise. Our correspondent points out a number of abuses that have burdened the grain trade for years, and suggests ways and means for remedying them which would surely prove effective if grain dealers would all take hold of the association rope and give a long pull and a pull all together for reform.

The toleration of one abuse or imposition serves a double purpose; it impoverishes the country dealer and makes him an inviting mark for other abuses. The carriers, terminal warehousemen and many commission men have no respect for his rights and knock him about just as any ruffian would a weaker person, not al-

ways because they expect to gain thereby, but because they know the dealer will not make any effort to protect himself. Even now an effort is being made at Chicago to reduce the charge for storage, which, if done, will insure heavier dockages for future shrinkage (larger steals) by the terminal warehousemen.

As heretofore country shippers will no doubt continue to protest against the steal, maybe a little more vigorously at first, but the majority will soon peacefully submit, and finally the warehouseman will take what is left in the car at destination for future shrinkage. This will come unless the apathetic chumps now striving to get an existence out of the grain business rise up, combine and fight for their rights.

THE HATCH BILL HUNG UP.

On June 22 the Hatch Bill was called up and passed by a vote of 199 to 87. The bill as passed by the House includes flour, the amendment to include it having been offered by Mr. Aldrich of Illinois and carried by a vote of 93 to 33. This was a shrewd move as it insured antagonism for the bill in the Senate by Mr. Washburn, Hatch's former lieutenant, or at least his indifference. Mr. Hatch included flour in his bill, but it was amended in committee, through the influence of Mr. Washburn it is claimed, so as to exempt flour. Mr. Washburn evidently did not think the bill altogether harmless to the legitimate flour trade.

The fate of the bill in the Senate is problematical. It is altogether likely that it will not be called up this session and will go over until next winter. It will meet with uncompromising hostility from many of the Senators who may talk it to death. In case it should pass before March 4 it is confidently believed that President Cleveland would give the bill a final quietus with the veto power. Its hampering of legitimate business would sanction this, even if the President were opposed to option trading; for the fact must not be lost sight of that the bill taxes all future sales of the commodities mentioned, whether delivery is made or not. It would put every grain dealer and miller under government surveillance. It is thoroughly mischievous in every feature; and this fact is now recognized by a large number of conservative agricultural papers.

STRIKING EFFECTS.

The rebellion which Mr. Debs and his misguided followers waged against the United States in general and the railways in particular had the result of paralyzing the grain business over a large space of territory, along with almost every form of industrial activity. Receipts of grain at Chicago and most other Western centers fell to almost nothing from the first day of the strike. The receipts of grain for the first half of July will be the smallest on record at a great many cities. A famine of feed and hay was impending everywhere when the blockade was broken, and we imagine dealers will have a lively business for awhile.

For the first time in their history many of the Chicago elevators were closed and their forces of men discharged, except such as were retained to guard the property. A number of cars of grain were fired by the rioters and the contents of others strewn on the ground. Several of the elevators are located in "storm centers" of Chicago's turbulent population; and it is a matter of congratulation that they escaped destruction.

At the present writing the trouble is apparently all over, and the railroads are rapidly straightening out their systems. Undoubtedly the stagnation and partial grain famine experienced in many cities will be over by the time this reaches the reader's eye, and may possibly have given place to unusual activity. But the people of the United States are not likely soon to forget the treasonable interference with the

rights of commerce by Debs and his misguided dupes. It is the almost universal wish that an example be made of those who caused the loss of millions of dollars of property by actual destruction and pillage, besides the losses to business of millions more by a senseless and criminal insurrection against the laws and the whole people.

SOLICITING SHIPMENTS FROM FARMERS.

A certain grain trade shark who found country grain dealers too sharp for his tricks is again filling the agricultural papers full of false claims and accounts of supposititious cases, in which the country grain buyer is depicted as an arch swindler, in hope of driving the gullible producers into his net. This commission man ran out with the regular shippers and has been engaged ever since in soliciting shipments from producers. The wild tales he tells of the fabulous sums saved to the farmers is enough to stagger the most creditable descendant of Ananias now living.

If the country shippers were well organized they could easily catch this trade leech in the crooked work he lays at their doors, and with ample evidence have him expelled from the Exchange and circulate far and near in the agricultural papers the story of his fall from grace. Every country shipper also should be told of it.

No objection is made to his soliciting consignments from farmers, but there are serious objections to his charging all country shippers with trickery, which few know of being practiced and of which many never heard until he told the story. After the farmers have been prejudiced against the country buyer by the false charges of this self-styled honorable man, they become easy dupes to his flattery.

A CARRIER WHICH OWNS AND OPERATES ELEVATORS.

This number contains the first of a series of articles on the elevator system of the Lake Shore & Michigan Southern Railroad Co. by one who was connected with the system for years. The system has some disadvantages as well as advantages. The owner cannot do aught to the grain to improve its grade, and each shipper no doubt is restricted to less storage room than he needs.

The establishment of such a system of elevators for the receipt of grain from all comers is an acknowledgment that carriers should provide facilities for receiving and shipping grain in bulk. That they should provide storage facilities and store grain free of charge is truly remarkable. Yet the Lake Shore is doing this, while the Illinois Central and other roads charge \$1 to \$10 per year for the privilege of providing receiving, storing and shipping facilities. The Missouri Pacific charges \$20 per year and one Western line gets \$50 per year at some stations. The \$1 rental fee, which has been increased to \$10 at so many stations along the Illinois Central, was only the entering wedge. When the elevator men are charged \$50 to \$100 per year for providing these facilities along the railroad rights of way they may see the point the Central is now making for. It is a skin game all through. The franchise of each carrier requires it to provide these facilities, yet they ignore it and charge any who provides them for himself.

It would prove more satisfactory to the producer if a practical grain man was in charge of the elevator at the country station and was intrusted with the grading of all receipts. Farmers who desired them should be given special bins. The most satisfactory way of settling the matter, where country dealers have erected houses on railroad right of way, is for the carrier to give the rent free and one-half cent a

bushel on all grain loaded from his elevator, providing the elevator man shall receive grain for shipment from all comers and store the same three days free. He should be allowed to collect a nominal fee from owners on grain held longer. This would be more satisfactory to the farmers and induce them to market more grain than they do now. It would insure the elevator man a fair business and relieve him of the unfair competition with the man-with-a-scoop.

NO "REGULAR" ELEVATORS AT CHICAGO.

Chicago has no "regular" elevators and the elevator men and the members of the Board of Trade are still struggling over the buying and selling of grain by warehousemen. The members are not striving to score additional points against the elevator men, but are now seeking a compromise that will prove acceptable to all the elevator men and give the city its usual quota of regular elevator capacity. Since July 1 the city has had no regular grain warehouses, and country shippers who had sold in the Chicago market against their holdings have been occasioned loss and inconvenience.

The last proposition submitted is in the form of an amendment to the rules and the abrogation of the amendment adopted last month. It provides among other things that:

"No warehouse shall be declared regular unless it is provided with a supervising inspector, who shall so supervise the storage and distribution of grain or of flaxseed in such warehouse that no discrimination or selection can be made in the quality of any grade of grain or of flaxseed in the delivery of such grain or flaxseed; and unless the storage rates on all grain or flaxseed received in such warehouses in bulk and inspected in good condition, shall not be in excess of \$ of 1 cent per bushel for the first ten days or part thereof, and $\frac{1}{2}$ of 1 cent per bushel for each additional ten days or part thereof, so long as such grain or flaxseed remains in good condition, the said storage rates to be in force for not less than three years from July 1, 1894."

The elevator men raised no objection to the placing of an inspector in each house for the purpose of allaying suspicion as to the methods employed by warehousemen in conducting their business when it was suggested by the Board's conference committee some time ago, so it seems probable that this much may be done toward putting a stop to public warehousemen disposing of the cream of any grade at a premium. The warehousemen suggested that if second storage were charged for at one-thirtieth of a cent per day it would prove convenient and effect a saving to the trade.

These two points the elevator men seem willing to grant, but it is not likely they will grant any more unless they are compelled to do so, and the Board seems to be very slow at coercion. No new storage has been provided, so the old houses must again be declared regular or the members on 'Change will have no storage certificates to deal in. The desire for compromise is rife and a settlement will soon be effected.

A MILWAUKEE daily paper deplores the exhaustion of our fertile soil and predicts that the United States will cease to export wheat inside of ten years. It overlooks the vast plains of virgin soil and the demand that immigration be restricted. We will never stop exporting wheat on account of lack of facilities to produce it, but our farmers may go into the production of more profitable crops.

THE Indiana State Board of Underwriters has adopted a new schedule for rating grain elevators. It has adopted a base rate of \$1.50 per \$100. It is intended to apply the schedule to all the elevators in the state. The companies claim that they have made no money on elevators in Indiana, and believe that their new schedule will put this class of property on a paying basis—for the companies of course.

EDITORIAL

MENTION

OCEAN rates on grain have been so very low recently that the shipper paid nothing for the service, and yet our exports have not been unusually heavy.

WE have received a number of reports to the effect that the quality of the wheat crop in Kentucky and Indiana is excellent, and that the quantity is far above expectations.

THE Belgian government will probably place a prohibitory duty on flour, but continue to admit wheat free. In case the change is made that country will prove an attractive market for American wheat exporters.

THE elevator war at Buffalo together with the low lake and canal rates ordinarily would attract much grain to the seaboard, but the Chicago elevator men need carrying charges so keep the grain here to earn storage.

WITH this number, the AMERICAN ELEVATOR AND GRAIN TRADE commences its thirteenth year. We think Volume XII was better than any of its predecessors, and we propose to try to make Volume XIII still better.

A NUMBER of gentlemen connected with the grain trade would be pleased to know the whereabouts of J. D. Richland, formerly of Kansas City. Anyone able to give this information will confer a great favor by doing so.

A LARGE number of old, worn-out grain cars were burned at Chicago recently, so country shippers will suffer no more losses on account of these cars scattering their grain along the line to market. However, shippers should cooperate every car just as carefully as ever, for many leaky cars are still in service.

GRAIN bags have been put on the free list, but jute burlaps from which they are made are subject to a duty. The Senate did not intend to pass a tariff bill that would foster and protect foreign manufacturers from the fierce competition of American manufacturers, but that is what they have done for the bag makers.

WHILE wheat is so cheap it would be a good time to substitute the modern standard of measure—the cental—for the inconvenient bushel. The commission merchants would not protest so vigorously as at a time when the option traders are able to pay a higher commission on sales. Grain is weighed and shipped by the hundred and should be sold by the hundred.

OSWEGO, N. Y., recently received a cargo of 52,000 bushels of wheat from Duluth for export, the lower transfer charges at that port making it possible to send grain via that port for less than via Buffalo. This route may prove attractive when the elevator war at Buffalo is over, and then the Buffalo pool may be inclined to be more reasonable in their charges.

DURING the past month few country grain dealers have been feeling their oats, in fact they could not get any to feel although they sent buyers in all directions. Reports from several states show that the farmers had none to sell. Country dealers that had any on hand shipped them to central markets. When they did not have a carload they mixed wheat with the oats

to fill out the load, of course, and thus got about 85 cents for their wheat. City buyers did not protest.

OUR department devoted to "Elevator and Grain News" shows wonderful activity in the building of new and the remodeling and enlarging of old elevators. This is not only the case in the country, but also in the central markets. More is being done in this line this year than for several years past, and stands in marked contrast with the stagnation ruling in other lines of business.

IN "Latest Decisions" this number will be found a recent decision bearing upon unrecorded bills of sale which should be perused by every elevator owner. The decision was misreported by the daily press, as is usually done with trade matters, so many elevator men may have been misled thereby. A bill of sale, like a mortgage, gives the holder precedence over common creditors only when the paper is recorded.

THE enterprising hay dealers of Kansas City have recently done a good work in the interests of country hay shippers. They have taken steps that will secure the placing of wagon scales near to the team tracks so that teamsters will not have such an excellent opportunity to rob the shipper without the receiver knowing it. The power of trade organizations is always exerted for good. The great trouble is that it is not exerted often enough.

SHIPPERS should take the precaution to have all bills of lading read "freight charges C. O. D." Then they will be relieved of all responsibility for the same. We give again in this number the experience of a Nebraska shipper in this matter, also a copy of the bill of lading he received from the carrier. If any shipper has had a similar experience or knows of a like case he will confer a great favor and may materially assist a brother shipper by giving us the particulars.

STORAGE elevators built on the same plan as grain storage houses have been adopted and used successfully by the rice trade in the South, and now a storage house is to be built in South Chicago for handling salt in bulk. A great quantity of salt is used annually at Chicago and heretofore it has been brought from Buffalo in barrels. In hope of decreasing the cost for transportation an experiment was made in carrying it in bulk in the hold of a vessel like grain. This was so successful that an elevator will be built.

THE grain dealers and millers of Central Illinois have made a shrewd move to rid themselves of the expense of furnishing grain bags to farmers to market grain in. They have sold all their bags to a company organized to rent bags at $\frac{1}{2}$ cent for the first day and $\frac{1}{4}$ cent for each succeeding day. This charge is likely to encourage the prompt return of the bags and the marketing of grain soon after it is threshed. The leniency of some dealers in the furnishing of bags to farmers is startling, and it is a wonder they do not offer to haul it to market as well as furnish the bags. The practice is not business-like and should be abandoned.

ON another page will be found the advertisement of the Smith Pneumatic Transfer and Steel Storage Company of this city, setting forth concisely the aims and claims of this system. In the present contest between the Chicago Board of Trade and the elevator owners, this system has been the one figured on to give the board cheap storage in case the elevators hold out and decline to comply with the conditions imposed by the board. On this account the system has attracted wide attention from the grain men, as offering a solution of the problem with which they are confronted of having no regular houses in the

city. The system has received strong indorsement from scientific and practical men, and its exhibit at the World's Fair last year was a center of attraction.

THE aim of the Hatch Bill is to abolish, by taxing to death, the clearing principle in the grain business. According to Hatch, if Smith sells 5,000 bushels of wheat to Jones, Jones sells it to Brown, Brown to Robinson, and Robinson to Green, the transaction is gambling if Smith makes delivery to Green, thus satisfying the whole chain of sales. But if in each case the wheat is handed over, the transaction is legitimate, although Hatch proposes to tax every one of these legitimate sales and deliveries. From every point of view the Hatch Bill is a menace, but in endeavoring to suppress the clearing principle it is a distinct step backward.

WHAT will become of the grain elevators on the Chicago River when the drainage canal has been completed? is a question that is now being asked. The elevators along the south branch will especially suffer as the tunnels under it will prevent a deepening of the river channel, and it is estimated that the water will be two feet lower than it is at present, which would permit vessels to draw only 14 feet when passing over the tunnels. The current will be four miles an hour, which will also make it a dangerous stream for the large lake vessels to navigate. This fact together with the 20-foot channel at South Chicago is attracting the new houses to that port.

THE new tariff bill and its 600 amendments has at last been passed by the Senate. As the bill now reads it provides for an ad valorem duty of 20 per cent. on buckwheat, wheat, corn, cornmeal, oats, rye; 30 per cent. on barley and pearled, patent or hulled barley, and 40 per cent. on barley malt. The market price of any of these cereals varies materially in different parts of the Dominion of Canada, and with the exception of barley the price is usually much lower in the western markets. So that the new tariff law if not altered will encourage shipments of grain from western Canada points to eastern American markets and discourage shipments from Ontario markets.

THE railroads entering Kansas City have refused to accept elevator weights and insist that the track scale weights, which have always been notoriously unreliable, be accepted by shippers and receivers as correct. It is time that those connected with the grain trade did something to bring the carriers to time in this matter. The claim that track scales are more reliable than hopper scales is ridiculous. If carriers will not accept hopper scale weights the shippers should rise up in their might and demand that scales be abandoned and expert guessers be employed. The carriers might be willing to give clean bills of lading—a thing shippers are entitled to receive and should fight for.

IT is amazing to find people occasionally who seem densely ignorant of the very subject they have apparently studied for a lifetime. We remember nothing quite so astounding as some remarks lately made by Joseph Arch, who for a third of a century or more has been the champion of the agricultural laborers of England. Mr. Arch might reasonably be expected to know something of English agriculture; but apparently he does not. He denies that it has lost anything in the past 20 years. He says that good farmers have made money and lived better than they did 20 years ago. He says that American competition is all humbug, and that the American farmer cannot compete with the English farmer even in wheat raising. If Mr. Arch is correct, everybody and everything else, especially the statistics, must be wrong. No

fact has been so generally conceded and deplored in England as that wheat growing was unprofitable, and figures show that it has been alarmingly on the decrease for years. But Mr. Arch says it is all bosh.

THE Chicago Grain Receivers' and Shippers' Association was reorganized recently and new officers were elected. If the association has adopted any resolutions or held any meetings it has kept it very quiet. We would be pleased to have some of the members make use of these columns and tell what purpose they have in view in associating. The country shippers would find the Chicago market far more attractive if their shipments were not docked for shrinkage a hundred years hence and their grain was not permitted to stand night after night in unguarded freight yards. Large shortages hurt the business of the Chicago receivers more than any other abuse, yet they have made no effort to remedy the evil. They seem to forget what they are organized for.

ACCORDING to the June report of the Bureau of Statistics breadstuffs to the value of \$7,966,820 were exported during June, against an amount valued at \$16,437,724 exported during June, 1893; and for the 12 months ending June 30 breadstuffs valued at \$161,777,730 were exported, against an amount valued at \$195,911,615 in the same time of 1892-93. In June 3, 450,012 bushels of wheat, valued at \$2,183,553, were exported, against 10,622,683 bushels, valued at \$8,106,177, in June, 1893; and during the 12 months ending June 30 87,958,286 bushels, valued at \$59,124,297, were exported, against 117,104,075 bushels, valued at \$93,421,885, in the same time of 1892-93. In the 12 months ending with June 230,836 bushels of rye were exported, against 1,477,086 bushels in the same time of 1892-93. In the 12 months 5,671,352 bushels of oats, 63,425,655 of corn, and 4,740,586 of barley were exported, against 2,338,212 bushels of oats, 44,851,447 of corn and 3,034,675 of barley exported in the same time of 1892-93.

A GERMAN ELEVATOR CUP.

The accompanying cut shows a novel elevator bucket which has been patented in Germany. The cut is sufficiently explanatory without entering into



A GERMAN ELEVATOR CUP.

details. The cup is made in two halves which slide into each other, by which the width of the cup can be increased or lessened at will. Each half has a hole for fastening the cup, and a lock or catch is provided for holding the halves together in any relative position desired. It is a novel invention, to say the least; but whether its utility compensates for the extra labor bestowed upon its manufacture is another question.

The bulk of the flaxseed produced in this country is raised in the states of the West and Northwest. In 1892 the entire acreage was 1,477,000, of which 404,000 acres are credited to Minnesota. In 1891 that state had 425,000 acres of flax under cultivation. Next in importance in the year 1891 was Kansas with 300,000 acres and an estimated yield of 2,600,000 bushels of seed. Iowa, in the same year, produced about 3,000,000 bushels from 280,000 acres, while North Dakota and Mississippi yielded 580,000 and 459,000 bushels respectively.

DOTS AND BASHES.

Some districts in Indiana are infested with the wheat midge.

The first car of new wheat arrived at Toledo, Ohio, June 18, and came from Oklahoma.

The first car of this crop's wheat sold at San Francisco, Cal., brought \$1.02½ per cental.

Elmer Bullock of Starkey, N. Y., has grown rye that, a report says, is seven feet high.

Last year the value of Louisiana's rice product was \$3,000,000, and her corn, oats and hay crop \$10,000,000.

California farmers are storing their new hay for an advance in price, which they are confident will come.

J. E. Teasdale, Canton, Mo.: "Please send me your AMERICAN ELEVATOR AND GRAIN TRADE. I need it in my business."

Peter Jones of Durham, Cal., has discontinued wheat growing, and says he can make more money from an olive orchard.

Charges of railroad discrimination against Philadelphia and in favor of New York have been denied by an investigating committee.

The first new Southern wheat arrived at Baltimore, Md., June 9. There were 152 bushels. It came from Virginia and sold at 80 cents.

Do not forget that a grain commission merchant who understands his business can earn his commission in either buying or selling grain.

An amendment has been made to the Hatch Anticipation Bill exempting a bona fide sales of grain for actual delivery made in course of business.

A. H. Richner, Penfield, Ill.: "Please send me the AMERICAN ELEVATOR AND GRAIN TRADE and the American Miller. I cannot do without them."

The Kansas railway commissioners have ordered a reduction of 15 per cent. in freight rates, but the railroads will contest the enforcement of the order.

Quite a number of Pennsylvania farmers say that they intend to plant rye next fall instead of wheat. Chester county alone gives promise of a yield of 1,000,000 bushels.

A Wisconsin farmer planted corn this spring on land on which, he says, he has raised corn for the past 59 years. And he claims that the last crop was about as good as the first.

'Tis an ill wind that blows nobody good. Which is illustrated by a Covell (Ill.) grain dealer getting good prices for corn cobs to be used as fuel during the late coal miners' strike.

A. S. Woodward, a St. Paul, Minn., grain man, has been arrested for trying to learn to ride a bicycle on the sidewalk. The dispatch does not state the number of people killed.

The supply of flaxseed in the principal markets of the West is reported to be but one-third that at this time last year. Chicago has been receiving stocks from the Northwest.

The first car of new wheat was received at San Francisco, Cal., on June 10, and was sold the following day at 61½ cents. Last year the first car arrived on June 2, and sold at 81 cents.

The first carload of Missouri's wheat crop of 1894 was sold at auction at St. Louis for 66 cents, 10 cents above the market. Paddock, Hodge & Co. of Toledo, Ohio, were the purchasers.

During the nine months ending with April Germany imported 1,890,000 quarters (of 480 pounds each) of wheat and flour, against 1,728,000 quarters in the corresponding nine months of 1892-93.

Henry C. Stuart, consul-general at Guatemala, writes that flour and grain exported from the United States to Guatemala should be put up in gunny bags and in 50-pound packages, three to the bag.

The Wheat Growers' Association at Walla Walla, Wash., have petitioned the Interstate Commerce Commission for a rate of 1 cent per ton per mile from all points of the Walla Walla Valley to tidewater.

No barley malt was imported during May, against 97 bushels imported in May, 1893; and during the eleven months ending with May 4,366 bushels, valued at \$5,013, were imported, against 3,237 bushels, valued

at \$4,033, imported during the corresponding months ending with May, 1893.

The Belgian government is contemplating the placing of the following duties on imports: Flour, about 36 cents per 280 pounds; oats, about 52 cents per 304 pounds; oatmeal, about 62 cents per 240 pounds.

There is one error in weighing grain—to set scales at 1,000 pounds, and then duplicate same. Never do this. Always weigh the grain at catch weights and then duplication and corresponding errors are avoided.

A farmers' club in Michigan is to discuss the question, "Would the passage of a law for the proper grading of wheat and the appointment of a state grain inspector be beneficial to the farmers of the state?" No.

At a recent meeting of the Dallas (Texas) Commercial Club a sample of black Russian oats was exhibited. The grain resembled the Tartary oats grown in the British Isles. It yielded 100 bushels to the acre in Dallas county.

Kansas experienced some extraordinarily opportune rainfalls last month, making what promises to be one of the biggest corn crops that state has had. And, strange to say, the wheat is as yet not reported injured thereby.

A grain company recently received a shipment of baled hay which had been bound with only two No. 15 wires. As a consequence a dozen bales broke open and the hay was scattered over the ground, rendered absolutely unsalable.

On account of the railroad strike at Chicago elevators along the river were closed down and kept under guard, for the reason that little or no grain could be moved and that there was danger of a raid being made on the property at hand.

The advance in oats has practically stopped the sale for consumption in many markets. Duluth, for instance, has ceased to buy, and instead of oats, ground feed, bran and other millstuffs, which is very cheap at present, are being used for feeding.

This is the uncertainty of farming life. A Nebraska farmer sowed his land to rye; the rye was a failure and he plowed up the ground to sow oats; the oats were a failure and he sowed millet, and is now awaiting developments with some curiosity.

The Hay Dealers' Association of Kansas City, Kan., is putting into practice plans for securing scales in the railroad yards. They have one scale now in operation. The receivers of Kansas City do a good service to shippers by this innovation.

Wheat growers have received many lessons in economy of late, and they now say that they must sow fewer acres and get larger yields. To accomplish this result the fertility of the soil must be increased; and first of all wheat must advance in price.

The millers, flour men and grain dealers of St. Louis, Mo., held their 17th annual excursion on June 6. Fully 3,000 excursionists left on the steamer Grand Republic for a day's outing up the river. The trip included a three hours' ride to Chouteau Park, where luncheon was eaten, and home by the way of Alton. A varied programme, consisting of recitations, vocal and instrumental music, was given on the boat, and the day was enjoyed by all.

The Ohio State Board of Agriculture's crop bulletin for July 1 is based on reports from correspondents in each township. Acreage is estimated by comparison with the area of last year; condition by comparison with a fair average condition. The following figures represent percentages: Wheat, condition, 93; barley, condition, 92; rye, area plowed and put in other crops, 2; oats, condition, 87; corn, area, 102; corn, condition, 89; corn, damage by grub worm, 6; clover, damage by white grub, 5; clover, tons produced per acre, 1½; clover, quality, 87; potatoes, area, 108; potatoes, condition, 92; timothy, condition, 79. The wheat harvest is on. The weather has been most favorable to its growth and ripening, so that the condition has kept up, and, if anything, has slightly improved during the month. The area of corn shows an increase of about 50,000 acres. Cut worms and white grub have done considerable damage. Potatoes have increased in area about 9,600 acres. Clover was damaged by drouth in the fall, freezes in March and later on by insect pests.

RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago since June 15 has been as follows:

May.	No. 2 RED W. WHT.		No. 2 SFG. WHEAT.		No. 2 CORN.		No. 2 OATS.		No. 2 RYE.		No. 3 BARLEY.		No. 1 FLAX SEED.	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
15	57 1/2	58 1/2	58	58 1/2	40 1/2	41 1/2	42 1/2	42 1/2	49 1/2	49 1/2	54	54	138	138
16	57	58 1/2			40	40 1/2	42 1/2	42 1/2	50	50	54	54	139	139
17														
18	58 1/2	59 1/2			41	41 1/2	43 1/2	43 1/2	49 1/2	49 1/2	54	54	139	139
19	59 1/2	60 1/2			41	41 1/2	43 1/2	43 1/2	49 1/2	49 1/2	54	54	140	140
20	59 1/2	60 1/2			42	42 1/2	44 1/2	44 1/2	50	50	54 1/2	54 1/2	141 1/2	141 1/2
21	59 1/2	60 1/2			42 1/2	43 1/2	45 1/2	45 1/2	50	50	56	56	141 1/2	141 1/2
22	59 1/2	60 1/2			41 1/2	41 1/2	43 1/2	43 1/2	50	50	52	52	141 1/2	141 1/2
23	59 1/2	60 1/2			40 1/2	41 1/2	43 1/2	43 1/2	49 1/2	49 1/2	52	52	143	143
24														
25	60 1/2	61 1/2			40 1/2	41 1/2	43 1/2	43 1/2	50	50	52	52	143	143
26	60	60			40 1/2	41 1/2	43 1/2	43 1/2	51	51	50	50		
27	59	59 1/2			40 1/2	41 1/2	43 1/2	43 1/2	51	51			146	146
28	59	59 1/2			41 1/2	41 1/2	44 1/2	44 1/2	50	50				
29	57 1/2	57 1/2			40 1/2	41 1/2	44 1/2	44 1/2	50	50			144	144
30	57 1/2	57 1/2			41 1/2	41 1/2			50	51				
1														
2	57 1/2	58 1/2			41 1/2	41 1/2	44	45	50	51			142	142
3														
4														
5	56 1/2	57 1/2	58	59 1/2	41 1/2	41 1/2								
6	56 1/2	56 1/2	58 1/2	57 1/2	40 1/2	41	45	45	50	50				
7	55 1/2	56	55 1/2	58 1/2	40 1/2	41	46	46						
8													125	125
9	56 1/2	56 1/2	58 1/2	59 1/2	41 1/2	41 1/2								
10	56	56 1/2	58 1/2	58 1/2	41 1/2	41 1/2	45	45					130	130
11	55	55	56 1/2	59 1/2	42	42 1/2			50	50			128	128
12	56 1/2	56 1/2			42	42 1/2								
13	56	56			42 1/2	42 1/2								
14	55 1/2	56			4 1/2	42								
15														

For the week ending June 23 prime contract timothy sold at \$3.60@4.85 per cental; prime contract clover at \$9.10@11.00; Hungarian at \$9.70@2.25; German millet at \$0.60@1.15; buckwheat at \$1.10@1.60 per 100 pounds. No. 1 flax on track sold at \$1.07@1.41. The receipts of hay for the week were 3,648 tons, against 3,900 tons for the previous week. The shipments for the week were 572 tons, against 1,042 tons for the previous week. A good demand existed during the week. Arrivals were only moderate and consignments were readily disposed of. Sales of No. 1 timothy ranged at \$10.00@11.00; No. 2, \$9.00@9.50; mixed, \$7.00@8.50; not graded, \$8.00@10.00; Illinois upland prairie, \$5.00@8.00; Indiana, \$6.25@7.00 old and \$9.00 new; Kansas, \$10.50@11.00 old and \$11.00@11.25 new; Wisconsin, \$5.50; Iowa, \$7.50@11.50 for poor to fancy. Packing hay, \$5 00. Wheat straw sold at \$5.00@5.50; oat straw at \$5.00@5.25, and rye straw at \$7.00@9.00.

For the week ending June 30 prime contract timothy sold at \$3.95@4.85 per cental; prime contract clover at \$9.00@11.00; Hungarian at \$8.55@2.25; German millet at \$0.60@1.20; buckwheat at \$1.10@1.60 per 100 pounds. No. 1 flax on track sold at \$1.10@1.46. The receipts of hay for the week were 4,223 tons, against 3,648 tons the previous week. The shipments for the week were 382 tons, against 572 tons for the previous week. The offerings of timothy hay were quite small during the early part of the week and the inquiry was good. Later the arrivals became larger and the demand less urgent. Sales of No. 1 timothy ranged at \$10.00@11.00; No. 2, \$9.00; mixed, \$6.50@9.00; not graded, \$9.00@10.00; Illinois upland prairie, \$5.00@7.50; Indiana, \$6.00@7.50; Kansas, \$7.00 for heating, and \$9.00@11.00 for good to choice; Iowa, \$8.00@11.00 for good to fancy; No. 1 Prairie, \$6.00; packing hay, \$4.50. Wheat straw sold at \$5.50; oat straw at \$5.25, and rye straw at \$6.00@8.50.

IMPORTS AND EXPORTS OF FOREIGN BREADSTUFFS.

The total value of breadstuffs imported during May, according to the last report of the Bureau of Statistics, was \$77,085, against imports valued at \$166,511 in May preceding; and during the eleven months ending with May breadstuffs valued at \$1,820,820 were imported, against imports valued at \$2,418,697 for the corresponding months ending with May preceding.

Barley aggregating 779,069 bushels, valued at \$353,105, was imported during the eleven months ending with May, against 1,954,617 bushels, valued at \$914,326, imported during the corresponding months ending with May preceding. Corn amounting to 2,142 bushels, valued at \$1,455, was imported during the eleven months ending with May, against 1,793 bushels, valued at \$1,243, imported during the corresponding months ending with May preceding.

We imported 6,102 bushels of rye, valued at \$3,049, during the eleven months ending with May, against 20,916 bushels, valued at \$8,748, imported during the eleven months ending with May preceding. We imported 50 bushels of rye during the eleven months ending with May, against 8,598 bushels, valued at \$7,055, imported during the eleven months ending with May preceding.

Wheat aggregating 967,841 bushels, valued at \$643,260, was imported during the eleven months ending with May, against 823,771 bushels, valued at \$586,372,

imported during the eleven months ending with May, 1893.

Of imported breadstuffs an amount valued at \$8,842 was exported during May, against an amount valued at \$19,856 exported during May, 1893; and during the eleven months ending with May breadstuffs valued at \$67,185 were exported, against an amount valued at \$425,120 exported during the corresponding months ending with May, 1893. Imported barley aggregating 17,485 bushels, valued at \$8,760, was exported during the eleven months ending with May, against 33,983 bushels, valued at \$16,993, exported during the eleven months ending with May, 1893. Wheat aggregating 71,276 bushels, valued at \$43,999, was exported during the eleven months ending with May, against 572,750 bushels, valued at \$393,943, exported during the corresponding months ending with May, 1893.

RECEIPTS AND SHIPMENTS AT MILWAUKEE.

The receipts and shipments of grain and hay at Milwaukee, Wis., during the 4 weeks ending June 30, as compared with the same period of the preceding year, were, according to Wm. J. Langson, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1894.	1893.	1894.	1893.
Wheat, bushels.....	450,450	755,800	30,134	91,180
Corn, bushels.....	87,750	68,250	13,650	39,735
Oats, bushels.....	1,206,000	905,000	1,039,353	858,750
Barley, bushels.....	73,190	182,700	12,800	106,861
Rye, bushels.....	70,600	53,700	46,000	59,600
Grass seed, pounds.....	6,290			27,305
Flaxseed, bushels.....	1,527	8,400	467	8,060
Hay, tons.....	1,083	1,761	272	1,121
Flour, barrels.....	248,400	144,390	298,798	227,057

RECEIPTS AND SHIPMENTS AT DULUTH.

The receipts and shipments of grain and hay at Duluth, Minn., during the month of June as compared with the same period of the preceding year, were, according to Frank E. Wyman, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1894.	1893.	1894.	1893.
Wheat, bushels...	1,113,389	2,139,008	3,068,046	7,554,968
Corn, bushels....	21,305		164,282	
Oats, bushels....	136,157		163,961	
Barley, bushels....				
Rye, bushels.....		577	24,015	5,715
Flaxseed, bushels.	115		115	49,320
Flour rec'd, bbls.	605,675	722,885	1,128,774	879,047
Flour produced, "	289,057	151,364		

RECEIPTS AND SHIPMENTS AT MINNEAPOLIS.

The receipts and shipments of grain and hay at Minneapolis, Minn., during the 4 weeks ending June 30, as compared with the same period of the preceding year, were, according to G. D. Rogers, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1894.	1893.	1894.	1893.
Wheat, bushels.....	3,021,940	3,650,700	411,420	1,371,880
Corn, bushels.....	121,430	100,240	44,350	17,760
Oats, bushels.....	202,080	252,210	177,800	215,120
Barley, bushels.....	1,230	20,960	1,720	3,780
Rye, bushels.....	7,800	9,720	8,700	8,840
Flaxseed, bushels....	1,900	10,030	8,420	8,270
Hay, tons.....	1,964	2,550	10	81
Flour, barrels.....	11,683	7,366	762,559	638,620

RECEIPTS AND SHIPMENTS AT PEORIA.

The receipts and shipments of grain and hay at Peoria, Ill., during the 4 weeks ending June 30, as compared with the same period of the preceding year, were, according to R. C. Grier, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1894.	1893.	1894.	1893.
Wheat, bushels.....	33,600	46,800	25,200	23,950
Corn, bushels.....	644,450	490,000	411,600	111,800
Oats, bushels.....	973,500	1,622,500	1,485,000	1,865,600
Barley, bushels.....	4,200	2,800	9,100	14,000
Rye, bushels.....	4,200	2,900	1,200	600
Mill Feed, tons.....	278	105	539	1,721
Hay, tons.....	2,590	2,500	290	350
Flour, barrels.....	19,200	22,350	13,245	19,714
Spirits & Liqueurs, bbls.	2,427	2,960	15,047	15,542
Syrup & Glucose, bbls.	3,050	800	3,237	15,360

RECEIPTS AND SHIPMENTS AT TOLEDO.

The receipts and shipments of grain and hay at Toledo, Ohio, during the 4 weeks ending June 30, as compared with the same period of the preceding year, were, according to Denison B. Smith, secretary of the Produce Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1894.	1893.	1894.	1893.
Wheat, bushels.....	577,700	339,400	454,800	791,900
Corn, bushels.....	134,000	470,000	49,900	604,100
Oats, bushels.....	4,100	15,200	4,900	3,800
Barley, bushels.....			1,200	2,300
Rye, bushels.....	5,000	6,100	11,900	5,600
Clover seed, pounds....				
Flour, barrels.....	8,145	7,499	65,623	10,205

RECEIPTS AND SHIPMENTS AT DETROIT.

The receipts and shipments of grain and hay at Detroit, Mich., during the 4 weeks ending June 30, as compared with the same period of the preceding year, were, according to Geo. M. Lane, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1894.	1893.	1894.	1893.
Wheat, bushels.....	133,253	249,991	420,074	318,320
Corn, bushels.....	94,453	122,400	6,441	36,255
Oats, bushels.....	116,571	167,744	2,752	23,160
Barley, bushels.....	1,400	5,700		
Rye, bushels.....	591	4,850		1,993
Hay, tons.....	1,120			
Flour, barrels.....	11,394	9,447	8,387	5,450

RECEIPTS AND SHIPMENTS AT ST. LOUIS.

The receipts and shipments of grain and hay at St. Louis, Mo., during the month ending June 30, as compared with the same period of the preceding year, were, according to Geo. H. Morgan, secretary of the Merchants' Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1894.	1893.	1894.	1893.
Wheat, bushels.....	137,800	245,050	128,031	1,006,453
Corn, bushels.....	1,990,800	3,182,200	1,803,370	2,520,891
Oats, bushels.....	526,900	699,600	203,911	252,719
Barley, bushels.....		1,500		
Rye, bushels.....	1,400	9,100	936	7,068
Hay, tons.....	9,541	10,252	3,562	1,948
Flour, barrels.....	108,198	80,207	165,897	152,374

WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at nine primary markets during the 52 weeks ending June 23, for the three last years, were as follows:

	1893-94.	1892-93.	1891-92.
St. Louis.....	12,187,000	25,464,000	26,084,000
Toledo.....	12,662,000	22,253,000	20,027,000
Detroit.....	8,377,000	8,204,000	7,619,000
Kansas City.....	12,932,000	25,825,000	15,704,000
Cincinnati.....	1,101,000	1,863,000	2,441,000
Winter wheat.....	47,259,000	83,609,000	71,785,000
Chicago.....	21,359,000	61,669,000	46,259,000
Milwaukee.....	11,103,000	14,858,000	12,661,000
Minneapolis.....	52,209,000	67,285,000	67,268,000
Duluth.....	31,442,000	39,122,000	48,719,000
Spring wheat.....	116,118,000	182,944,000	174,907,000
Total, 52 weeks....	163,372,000	266,553,000	246,782,000

Oa's recently sold in Chicago to be switched to team tracks had to be hauled out of the city for safety. This has caused some trouble in the trade, as sellers want to deliver and buyers want their grain. Both have generally adopted the course of waiting.

Make separate drafts and bills of lading for each car of grain consigned. State number of bushels loaded on back of draft. As different roads often bring in cars from same station, it is necessary to have separate bills of lading and drafts for each car.

James Birch, a farmer at Hepbrons Station, Md., is said to have planted a grain of wheat from which grew sixty-six stalks bearing over eleven hundred grains of wheat. And yet the farmers complain of hard times and wish for the passage of the Hatch bill.

VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, July 7, 1894, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Albany		63,000	40,000		
Baltimore	541,000	131,000	54,000	2,000	
Boston	328 0 0	45,000	4,000		
Buffalo	1,249,000	289 0 0	36,000	23,000	14,000
do afloat					
Chicago	17,699,000	1,735,000	93,000	124,000	6,000
do afloat					
Cincinnati	1,000		19,000	1,000	2,000
Detroit	1,980,000	1,000	15,000		1,000
do afloat					
Duluth	4,726,000		27,000		
do afloat					
Indianapolis	66,000	5,000	2,000		
Kansas City	229,000	13,000		5,000	
Milwaukee	968,000	2,000		2,000	1,000
do afloat					
Minneapolis	8,907,000		19,000		2,000
Montreal	598,000	1,000	196,000	26,000	8,000
New York	8,771,000	943,000	592,000	17,000	
do afloat					
Oswego	*145,000				
Peoria	84,000	101,000	3,000	1,000	
Philadelphia	232,000	68,000	97,000		
St. Louis	2,355,000	70,000	7,000	1,000	
do afloat					
Toledo	2,173,000	51,000	3,000		
do afloat					
Toronto	102,000		62,000		49,000
On Canals	1,712,000	747,000	476,000	17,000	
On Lakes	1,826,000	731,000	526,000		
On Miss. River	40,000	21,000	15,000		
Grand total	64,114,000	5,276,000	2,317,000	219,000	83,000
Corresponding date, 1893	61,819,000	8,533,000	3,015,000	361,000	390,000

* Repeated from last week.

INSPECTED RECEIPTS AT CHICAGO.

According to the report of Chief Grain Inspector George P. Bunker the grain received at Chicago during the month of June, 1894, was graded as follows:

WINTER WHEAT.

Railroad.	White.			Hard.			Red.			No Grade.
	2	3	4	1	2	3	1	2	3	
C. B. & Q.	2			6	8		33	53	11	2
C. R. I. & P.	1			2			6	18	4	
C. & A.	1			7	2		3	31	1	1
Illinois Central	1						14	23	1	
Freeport Div.										
Galena Div. N. W.							24	2	1	
Wis. Div. N. W.	2						31	49	22	1
Wabash	1						5	20	2	1
C. & E. I.							43	11	2	
C. M. & St. P.	1			9						
Wis. Cent.										
Gr. Western							15		1	16
A. T. & S. Fe.				8	2		4	41	2	2
Through & Spec.							189	56	5	
Total each grade	8			32	30		352	305	67	7
Total W. wheat										801

SPRING WHEAT.

Railroad.	Northern.	2			No Grade.	White.			Mixed Wheat.
		2	3	4		1	2	3	
C. B. & Q.									
C. R. I. & P.									
C. & A.									
Illinois Central									
Freeport Div.									
Galena Div. N. W.									
Wis. Div. N. W.									
Wabash									
C. & E. I.									
C. M. & St. P.									
Wis. Cent.									
Gr. Western									
A. T. & S. Fe.									
Through & Spec.									
Total each grade		250	17	9		1			2
Total sp. wheat									277

CORN.

Railroad.	Yellow.		White.		2	3	4	No Grade.
	2	3	2	3				
C. B. & Q.	831	90	92	10	482	89	21	1
C. R. I. & P.	198	162	5	8	230	273	30	4
C. & A.	287	18	22	3	220	11	6	1
Illinois Cent.	814	98	136	27	367	44	15	1
Freeport Div.	133	33	7	3	198	49	4	2
Gal. Div. N. W.	313	50	17	6	363	80	8	2
Wis. Div. N. W.	1	10				3		
Wabash	212	44	50	6	71	26	6	
C. & E. I.	13	37	17	7	29	6	2	
C. M. & St. P.	217	50	9		341	266	9	1
Wis. Cent.								
C. G. Western	18	6			84	11	2	
A. T. & S. Fe.	90	10	25	1	122	19	10	1
Th'gh & Spl.	71	31	21	15	81	63	2	
Total each grd	3,198	639	401	86	3,038	950	115	13
Total corn								8,440

OATS.

Railroad.	White.			2	3	White Clipped.		No G'de
	1	2	3			1	2	
C. B. & Q.	348	279		168	99			16
C. R. I. & P.	163	181		66	52			11
C. & A.	82	25		59	9			2
Illinois Central	77	22		107	16			
Freeport Div.	40	118		32	37			7
Galena Div. N. W.	90	219		32	106			1
Wis. Div. N. W.	110	108		12	12			
Wabash	32	4		36	11			
C. & E. I.	13	6		25	3			
C. M. & St. P.	145	288		68	92			3
Wisconsin Central	4	18		2	2			
C. G. Western	8	78		21	32			1
A. T. & S. Fe.	70	36		40	13			1
Through & Special	37	41		35	24			2
Total each grade	1,219	1,423		703	508			44
Total oats								3,897

RYE.

Railroad.	1	2	3	No Grade.
C. B. & Q.			3	13
C. R. I. & P.			2	7
C. & A.				
Illinois Central				
Freeport Div.			5	1
Galena Div. N. W.			4	3
Wisconsin Div. N. W.			19	3
Wabash				
C. & E. I.				
C. M. & St. P.			29	4
Wisconsin Central				
C. G. Western			10	7
A. T. & S. Fe.				
Through & Special			1	
Total each grade			3	83
Total rye				27
				115

BARLEY.

Railroad.	Bay Brewing.	Chevalier.	3	4	5	No Grade.	Total No. Cars all grain by Roads.
C. B. & Q.			3			1	2,679
C. R. I. & P.			2	13		1	1,452
C. & A.							791
Illinois Central							1,763
Freeport Div.			6	1			676
Galena Div. N. W.			1	1			1,322
Wis. Div. N. W.			1	25	20	1	354
Wabash							603
C. & E. I.							186
C. M. & St. P.			52	14	3	2	2,172
Wisconsin Central							26
C. G. Western			3	3	1		272
A. T. & S. Fe.							497
Through & Spec.							920
Total each grade	1	1	97	52	7	4	162
Total barley							13,713
Total grain							

EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending July 7, as compared with same weeks last year, have been as follows:

	For the week ending July 7.		For the week ending July 8.		For the week ending June 30.		For the week ending July 1.	
	1894.	1893.	1894.	1893.	1894.	1893.	1894.	1893.
Wheat, bu.	996,000	2,935,000			718,000	2,580,000		
Corn	269,000	698,000			694,000	886,000		
Oats	2,000	306,000			31,000	281,000		
Rye		17,000				39,000		
Flour, bbls.	266,000	269,000			267,000	258,000		

RECEIPTS AND SHIPMENTS AT CHICAGO.

The following table, compiled by George F. Stone, secretary of the Board of Trade, shows the receipts and shipments at Chicago during June, 1894 and 1893, of seeds, hay and broom corn:

Repts.	Timothy lbs.	Clover lbs.	Other grass seeds, lbs.	Flax-seed, bu.	Broom corn, lbs.	Hay, tons.
1894	124,030	3,030	273,760	53,450	387,180	19,196
1893	151,800	4,600	597,793	82,796	206,850	29,237
Shipments						
1894	206,868	3,065	1,020,746	58,578	627,289	3,396
1893	354,397	9,887	440,467	420,792	590,584	3,898

DESTINATION OF AMERICAN WHEAT EXPORTS.

The last report of the Bureau of Statistics shows that the destination of the wheat exported from the United States was as follows:

	Month ending May 31.		Eleven months ending May 31.	
	1894.	1893.	1894.	1893.
United Kingdom	3,350,732	3,436,493	48,945,845	67,153,909
Germany	98,044	303,578	1,599,066	2,626,651
France	190,767	1,286,059	8,669,163	6,752,423
Other countries in Europe	1,452,571	3,151,671	21,958,829	25,183,590
Brit. North Am. Possessions	787,689	1,146,673	3,631,230	4,248,806
Cent. Am. states & Brit. Hond.		3,333	30,472	44,882
West Indies and Bermuda	1,500	2,604	15,015	13,319
Other countries S. America	1,143	20	5,176	9,603
Asia & Oceania	1,619	894	11,622	15,179
Africa	1,140	2,000	87,019	375,512
Other countries	6,525		11,447	10,577
Total	5,891,730	9,333,325	84,964,948	106,498,372

DESTINATION OF AMERICAN CORN EXPORTS.

The last report of the Bureau of Statistics shows the destination of the corn exported from this country to be as follows:

	Month ending May 31.		Eleven months ending May 31.	
	1894. Bu.	1893. Bu.	1894. Bu.	1893. Bu.
United Kingdom.....	1,375,133	1,547,007	25,337,027	16,308,681
Germany.....	496,679	999,753	11,213,330	4,777,204
France.....	12,742	205,000	2,289,344	1,071,232
Other countries in Europe.....	461,780	812,703	10,879,918	5,813,439
British North Am. Possessions.....	1,145,815	1,430,205	10,259,397	4,460,437
Mexico.....	17,163	433,972	416,648	6,544,166
Cent. Am. States & Brit. Hond'rs	52,746	38,228	278,979	116,275
Cuba.....	93,575	54,124	1,023,293	977,820
Puerto Rico.....	3,340	3,630	10,649	21,874
Santo Domingo.....	328	1,497	5,646
Other West Indies and Bermuda...	66,171	45,585	579,916	439,158
South America...	2,102	9,473	118,991	470,793
Other countries...	2,885	1,720	21,324	20,456
Total.....	3,730,459	5,608,400	62,430,308	41,077,184

ELEVATOR AND GRAIN NEWS

A starch factory is wanted at Chadron, Neb.
 An elevator is being erected at Vermillion, Ill.
 A new grain firm is to locate at Morristown, Ind.
 Thomas Hartley's elevator at Oxford, Ind., has been closed.
 The Coe Elevator at Ancona, Ill., will soon be completed.
 Walter Bros'. Elevator at Oto, Iowa, is about completed.
 West & Andruss are building a new elevator at Mendota, Ill.
 A large grain elevator will be erected at Beaver City, Ind.
 Dr. Synder's grain elevator at Bowersville, Ohio, is completed.
 A. E. Clutter is having an elevator built at Spencer-ville, Ohio.
 An addition to the South Elevator at Onarga, Ill., is being built.
 J. S. Osborn, Eddy, N. Mex., has been succeeded by J. R. Hosmer.
 The erection of a grain elevator has been commenced at Ney, Ohio.
 Glasgow & McLean, Seattle, Wash., are erecting a large elevator.
 Vogel & Niedemeyer, grain dealers at Golden, Colo., have dissolved.
 George Brose, Evansville, Ind., is building a 25,000-bushel elevator.
 Send us items of interest to those connected with the grain trade.
 A large grain elevator is in course of construction at Athens, Mich.
 John Wild of Milton, N. D., is erecting a large granary on his farm.
 R. J. Smith of Metcalf, Ill., is erecting a grain elevator at Melwood.
 An elevator of 6,000 bushels' capacity will be erected at Marshall, Mich.
 The Winona Elevator Company is erecting an elevator at Salem, S. D.
 Work on the elevator and grist mill at Goshen, Ind., is well under way.
 H. W. Blaylock of Greenville, S. C., will build a cotton seed oil mill.
 Supervisor Field's elevator near Soledad, Cal., is nearing completion.
 J. O. Brown, an elevator man at Rex, Ohio, has made an assignment.
 Fuller & Spiller, Gardner, Ill., have begun the erection of their elevator.
 J. G. Cutler, Nora Springs, Iowa, has sold out his grain and coal business.
 P. M. Vest of Jefferson, Iowa, reports a rush of business at his elevator.
 J. T. Gordon intends to erect a receiving elevator at Pilot Mound, Winnipeg.
 Smith & Cunningham have gone into the grain business at Cushman, Ill.
 A. M. Titus, Rantoul, intends to start in the grain business at Princetown, Ill.
 Everett, Wash., is appealing to capitalists to give it an elevator and flour mill.
 Rindesbacher & Co., Stockton, Ill., are erecting an addition to their elevator.
 The new elevator at Delafield, Wis., is now completed and doing business.
 A cottonseed oil mill and soap factory will be erected at La Fayette, La.
 Stewart & Co., Rochelle, Ill., shipped 47 carloads of corn in the month of May.
 The agitation for the farmers' elevator at Stockton, Minn., is still an agitation.
 Work on the construction of an elevator is about to be begun at Beaman, Iowa.
 A cotton seed oil mill and canning factory will be established at Midville, Ga.
 Receipts and shipments of grain at Philadelphia, Pa., were considerably less in June than in the pre-

ceding month, while compared with June, 1893, the decrease was very material.

Wm. Chambers & Co. have embarked in the grain business at Pullman, Wash.

Bemis & Curtis, Chicago, Ill., will place three new cleaners in their malt house.

Brown & Barker, San Jose, Cal., dealers in grain and produce, have dissolved.

The Elk Brewing Company will erect a brewery at Kitanning, Pa., this summer.

The Farmers' Elevator Company of Galesburg, Ill., are about to erect an elevator.

Geo. W. White, Jordan, Iowa, is carrying on a business in grain, seeds, hay and straw.

A. Combs will handle grain at Ottawa, Ohio, for a Toledo grain commission firm.

L. M. Long, a grain dealer at Rippon, W. Va., has been succeeded by R. L. Ware.

Rockwell Bros., Saybrook, Ill., grain dealers, are now handling farm machinery.

The Toledo Elevator Company is now operating the grain elevator at Rushville, Ind.

Work has been commenced on Klenck's new grain warehouse at Oakland City, Ind.

F. G. Rounselle, Fowlerville, Mich., is building a 20x50-foot elevator and warehouse.

John Adger, San Antonio, Texas, has succeeded to the grain business of Harper & Co.

H. D. Reed & Co., Brockton, Mass., dealers in grain and hay, have dissolved partnership.

George Sanford of York, Neb., is now engaged in the grain business at Kansas City, Mo.

The Hoebl Brewing Company has been organized at Millvale, Pa., with a capital of \$25,000.

The Santa Fe Elevator at Atchison, Kan., is being repaired and having a new roof put on.

Brooks Bros., Buxton, N. D., have taken possession of the elevator property of Reeve Budd.

Hussong, Newlin & Co., grain dealers at Hutsonville, Ill., are erecting a new grain office.

The Interior Elevator Company, Minneapolis, Minn., has increased its capital stock to \$350,000.

W. H. Stokes will soon begin the erection of an elevator and grain house at Watertown, S. D.

The Thieme & Wagner Brewing Company of Lafayette, Ind., will erect a large malt house.

The Central Elevator at Fort Dodge, Iowa, is undergoing repairs. A new dump will be put in.

A Minneapolis firm is contemplating the establishing of a starch factory at North Yakima, Wash.

A stock company has been organized at Zanesville, Ohio, for the erection of a 40,000-bushel elevator.

Donald Campbell, who had a grain business and general store at Wellington, Ontario, has sold out.

Archer & Howe, who have a grain warehouse at Beresford, S. D., are putting in elevating facilities.

Austin, Fraser & Co. is the style of a new firm of grain commission merchants at Minneapolis, Minn.

The Farmers' Grain Produce Company has been incorporated at Duluth with a capital stock of \$25,000.

A new grain elevator will soon be under course of erection at Oneida, Ill. Mr. Hugh Greig is interested.

Mr. H. Gallon & Co., Pekin, Ill., will build a brick, three-story malt house 38x80 feet, at a cost of \$2,600.

Seeley, Son & Co., architects and builders, have charge of the erection of the new elevator at Amboy, Ill.

Nye, Jenks & Co., Minneapolis, Minn., grain dealers, have doubled their capital stock, which is now \$100,000.

The Waukesha, Wis., Grain, Feed & Lumber Company has been organized with a capital stock of \$10,000.

Steven Wycoff of Arrowsmith, Ill., has purchased the Tjardis grain elevator and will carry on the business.

H. N. Christy is now associated with A. E. Smith & Co., grain commission merchants at Cincinnati, Ohio.

S. F. Weidenbeck of Minneapolis, Minn., is contemplating the erection of a large brewery at Great Falls, Mont.

The E. H. Pease Manufacturing Company, Racine, Wis., sold over thirty large power corn shellers in June.

James Kerr, who does an extensive grain, hay and feed business at Montreal, has recently added a warehouse.

The elevator at Webster City, Iowa, now being erected for the Illinois Central Railroad, will be 34x48

feet in size, and it will contain all the latest improvements for handling grain. J. R. White is the contractor.

T. H. Reed is about to build an elevator at New Castle, Ind. Logan Hinshaw of Dunreith will have charge.

Grain men are planning to enlarge the grain business at Tampico, Ill. J. W. Glassburn's elevator may be sold.

Haynes, Gordon & Co., dealers in grain and coal at Chenoa, Ill., have been succeeded by Haynes & Kirkpatrick.

A co operative grain warehouse will be erected at Lake City, Minn., for which \$1,500 have been subscribed.

The Walter Bros. Brewing Company has been incorporated at Menasha, Wis., with a capital stock of \$100,000.

Perrill & Lewis, the new grain firm at Xenia, Ohio, are doing a good business, having already made large shipments.

A grain elevator at Pawhatton, Kan., will put in an outfit of the E. H. Pease Manufacturing Company's machinery.

The Great Western Elevator Company, Minneapolis, Minn., will erect a 25,000-bushel elevator at Kellogg, N. D.

The firm of J. V. & J. Hanson, the oldest firm of grain dealers in Salem, Mass., has gone into the hands of a receiver.

Mercer & Neal, Peru, Ind., now have possession of all the small station grain elevators between La Porte and Kokomo.

The elevator to be erected at Harvard, Ill., will be 48x36 feet in size, 84 feet in height, and 50,000 bushels' capacity.

J. B. Nicholl has been appointed receiver of the Seattle Terminal Railway and Elevator Company at Seattle, Wash.

Bartlett, Frazier & Co. paid out over \$40,000 for grain at their branch at Metamora, Ill., in the last three months.

A grist mill at Owosso, Mich., is being overhauled and refitted for Waterhouse & Bergey, who will use it for a brewery.

H. E. Simpson of Arcadia, Wis., discovered a shortage in his granary of 200 bushels of oats. Someone carried it away.

Peter Teches, grain buyer for the H. J. O'Neil Grain Company of Winona, has closed his grain house at Altura, Minn.

H. V. Miller, Bigelow, Minn., has purchased of the E. H. Pease Manufacturing Company a complete outfit of machinery.

Public subscriptions for an elevator at Mobile, Ala., are still going on. Nothing in the shape of maturing plans is reported.

The Portsmouth Brewing and Bottling Company has been incorporated at Portsmouth, N. H., with a capital of \$50,000.

A grain warehouse is in course of construction at Westport, Ind., and is expected to put life in the business of that town.

The Wolcott Milling Company of Harrisburg, Ill., will erect a 40,000-bushel elevator in connection with the Mitchell mills.

An elevator will be erected at Peoria, Ill., to be finished September 1, in place of the one destroyed by fire some time ago.

Mr. C. Tipler's elevator at Geuda Springs, Kan., is now completed and he is ready to handle the large crops of his section.

Miller & Smith, dealers in broom corn at Sullivan, Ill., have dissolved partnership, S. R. Miller remaining in the business.

Reed & Co. have leased the City Elevator and Feed Mill at Tacoma, Wash., and will manufacture farinaceous goods and feed.

Lilly, Bogardus & Co., grain and feed dealers at Seattle, Wash., are making large shipments of oats, feed, etc., to Honolulu.

H. C. Bear & Co., a new grain company at Urbana, Ill., have about completed their elevator and are ready to begin business.

Howard Miller, dealer in grain, coal and lumber at Battle Creek, Neb., has been succeeded by the Howard Miller Lumber Company.

W. C. Wasbschall, Waseca, Minn., will put in a new gasoline engine which he bought from the E. H. Pease Manufacturing Company.

Kingman & Co., Kansas City, Mo., have ordered a carload of farm grain cleaners of the E. H. Pease Manufacturing Company.

The General Fire Extinguisher Company, Chicago, recently equipped the Osborne & McMillan Elevator

at Minneapolis with a complete dry system of Grinnell Automatic Sprinklers, and the fire risk has thereby been greatly reduced.

H. M. Carleton, Colorado Springs, Colo., will put in a Pierce Gasoline Engine bought of the E. H. Pease Manufacturing Company.

A 100-ton cottonseed oil mill will be erected at Meridian, Miss. The Young Men's Business League has the project in charge.

The E. P. Pease Manufacturing Company, Racine, Wis., have just made a shipment of their grain cleaners to Christiania, Norway.

A 20,000-bushel farmers' elevator will be erected at Alpha, Ill., and will be controlled by W. H. Kernes, an experienced grain buyer.

Elliott & Bach, Centerville, S. D., grain merchants, are placing a fanning mill and other grain cleaning machinery in their elevator.

Louis I. Aaron & Co. of Pittsburg, Pa., have taken out a permit to build a brick elevator at South Chicago, Ill., at a cost of \$30,000.

The Farmers' Elevator Company, St. Louis, Mo., one of the new independent elevators of that city, has declared a dividend of \$3.

Adams & Overton, Nebraska City, Neb., will put in a complete outfit of the E. H. Pease Manufacturing Company's elevator machinery.

The 1,000,000-bushel elevator at Grand Junction, East Boston, Mass., has been compelled to close down on account of lack of business.

The firm of Wilder & Puffer, grain and flour dealers of Springfield, Mass., has been dissolved, Mr. J. W. Wilder continuing the business.

A. S. Cowan & Son, Thomas, Mich., have purchased a large cleaner and other machinery from the E. H. Pease Manufacturing Company.

The Manson & Tibbitts Implement Company of St. Louis, Mo., have ordered farm grain cleaners of E. H. Pease Manufacturing Company.

J. N. Bacon, representing S. Howes, recently sold to F. P. Rush & Co. of Indianapolis, Ind., one of his company's well-known oat clippers.

R. F. Brett of Henry, S. D., and others are contemplating the purchase of the Strong & Miller warehouses at Butler and Bradley, S. D.

The elevator at Maple Hill, Kan., is being overhauled and refitted, the E. H. Pease Manufacturing Company supplying the machinery.

The Geo. P. Heilman Hominny Mills and Grain Elevator Company at Henderson, Ky., have assigned, but may resume business in a short time.

Subscribe for the AMERICAN ELEVATOR AND GRAIN TRADE, published monthly, and the *Hay Trade Journal and Directory*, weekly, \$2 per year.

Louis I. Aaron, Pittsburg, Pa., will erect a malt house of 500,000 bushels' capacity. The Simpson & Robinson Company have the contract.

The capital stock of the G. E. Gee Grain Company has been increased to \$25,000, which is a most substantial evidence of a growing business.

The Pratt-Baxter Grain Company, Taylorville, Ill., are erecting a grain elevator, and expect to have it completed in time for the coming crop.

The E. H. Pease Manufacturing Company, Racine, Wis., have just made a shipment of twelve of their grain cleaners to Dunedin, New Zealand.

The Harris Elevator Company, Sibley, Iowa, has bought two large outfits of elevator machinery from the E. H. Pease Manufacturing Company.

The E. P. Allis Company have the contract for a 28x48-inch Reynolds-Corliss Engine for Bartlett, Frazer & Co.'s elevator at South Chicago, Ill.

J. L. Smiley, Watseka, Ill., is building an addition to his elevator, and will add another dump and set of elevators and will put in a gasoline engine.

Seeley, Son & Co., architects and builders of elevators, etc., will probably build an elevator at Superior, Neb., whither their representative has gone.

Lynd & Peury, Virginia, Neb., have bought an outfit of machinery for their new elevator at that place of the E. H. Pease Manufacturing Company.

C. W. Cressler & Co., Scranton, Iowa, have bought a 4-horse power gasoline engine and other machinery of the E. H. Pease Manufacturing Company.

McLaughlin & Martin, Henderson, Minn., are erecting a 10,000-bushel elevator, which they expect to have ready for business in about two months.

The Liberty Cotton Seed Oil Co., Liberty, S. C., has been organized with a capital stock of \$20,000. W. O. Willard is one of the interested parties.

Wm. Simon & Co., grain merchants at Altura, Minn., are planning to enlarge and remodel their grain elevator to accommodate their growing business.

The Ryan Commission Company, St. Louis, Mo., are erecting a 500,000-bushel elevator at a cost of \$75,000. James Stewart & Co. have secured the contract.

The elevator will have three legs, each with a capacity of 15,000 bushels. It will be finished in three months.

The Marfield Elevator at Iroquois, S. D., has been overhauled and enlarged. A new automatic dump has been put in and a high tower is being erected.

During the five weeks from May 28 to June 30 there were inspected at Winnipeg 212 cars of wheat, against 822 cars for the same period of the preceding year.

Smith & Burr, Fort Dodge, Iowa, are overhauling their grain elevator and putting in a full outfit of the E. H. Pease Manufacturing Company's machinery.

James Ross is building a 50,000-bushel elevator at Raub, Ind., and has bought an entire outfit of machinery of the E. H. Pease Manufacturing Company.

W. H. Bauning, Wyoming, Neb., is erecting a new elevator, a complete outfit of machinery for which he has bought of the E. H. Pease Manufacturing Company.

J. H. Waddington, Geneva, Iowa, has bought a complete outfit of elevator machinery and Morton Tread Power of the E. H. Pease Manufacturing Company.

Moore & Gill, the Kansas City commission firm, has been reorganized and capitalized at \$3,000. The incorporators are Henry Moore, Frank Kemp and J. E. Johnson.

A Board of Review has been organized at Superior, Wis., the purpose of which is to try to have the Great Northern Elevators and the coal docks exempted from taxation.

Surbar & Evans, Seattle, Wash., alleging fraud in the terminal elevator and warehouse suit, request the court to set aside the decision by which a receiver was appointed.

The Middle Division Elevator Company has been incorporated at Chicago with a capital stock of \$5,000. The incorporators are Moses S. Bacon, E. R. Bacon and Otto E. Reidhelt.

It is reported that a Minneapolis and Duluth syndicate will erect a large elevator at Owen Sound, Ont., and operate a barge line between that port and the head of Lake Superior.

O. P. Merrick of Manteno, Ill., has purchased the elevator at Pine Village, Ind., for \$4,500. Pine Village is a pretty good grain point and Mr. Merrick is an experienced grain man.

The Marfield Elevator Company have recently bought several outfits of elevator machinery of the E. H. Pease Manufacturing Company for their houses in Minnesota and the Dakotas.

Mr. Lane intends putting in scales and buying grain at Potomac, Ill. The citizens want him to erect an elevator at that point, as it is a very good wheat center, and a house is needed badly.

The Great Western Elevator Company, Minneapolis, Minn., are contemplating the erection of a 25,000-bushel elevator at Bellevue, Minn., to replace the one burned there some time ago.

Hill & Brown, Nora Springs, Iowa, are erecting a 20,000-bushel elevator on the C., M. & St. P. R. R. It will have a complete outfit of the E. H. Pease Manufacturing Company's machinery.

H. Austin, Austinville, Iowa, and A. M. Whaley, Aplington, Iowa, have both placed orders with the E. H. Pease Manufacturing Company for Pierce Gasoline Engines and other new machinery.

The Southern Pacific Milling Company, San Francisco, Cal., have made more purchases of elevators, Faw Bros. having sold their interest in those at Sallinas, Chular, Gonzales and Soledad.

A 50-ton cotton seed oil mill will be erected at Chattanooga, Tenn., to be in operation within four months. W. G. Roberts, H. Bond, A. S. Glover and E. G. Richmond are interested in the enterprise.

The Napinka (Manitoba) Farmers' Institute has requested the Canadian Pacific Railroad to grant permission to load grain direct to cars instead of being compelled to ship through the elevator.

Spies & Son, Graettinger, Iowa, have purchased a complete outfit of machinery, including cleaners and a gasoline engine for a new house at Osgood, Iowa, of the E. H. Pease Manufacturing Company.

The Cornelius Mill Furnishing Company of St. Louis, Mo., will furnish the Kell Milling Company's new 50,000-bushel elevator at Vernon, Texas, with a full outfit of machinery, including engine.

In the case of the Lake Superior Elevator Company, Duluth, Minn., vs. the Red River Valley Elevator Company the sale of the Red River company's assets to the Minneapolis Trust Company was confirmed.

J. E. McSharren has brought suit against the Midland Elevator Company at Kansas City, Mo., for \$5,000 damages. McSharren was formerly an employe of the company, having been a fireman in the

Union Pacific Elevator, owned by the Midland Company. In January, 1893, he fell from a ladder which he was ascending and sustained serious injuries.

Parris & Kratz are just completing a fine new grain elevator at Amboy, Ill., and have bought their entire outfit of machinery, including a Pierce Gasoline Engine, of the E. H. Pease Manufacturing Company.

There is a splendid opening for an elevator at Sewell, Manitoba. Farmers object to shipping their grain through the luxurious medium of a flat warehouse, and so they market their grain at more distant places.

It is reported that Drexel, Morgan & Co., the owners of the Elgin, Joliet & Eastern Railroad (Outer Belt Line) intend to organize an elevator company and erect an elevator near the docks at South Chicago, Ill.

William and Lewis Dutton have purchased the grain, feed and fertilizer business of Andrew Osborne at Boothwyn, Pa. They are energetic young business men and intend to carry on a larger business than formerly.

E. F. Unland is managing Smith, Hippen & Co.'s grain business at Pekin, Ill. The company has branch houses and elevators at Fremont, Hainsville, Forest City and other places, and they report a prosperous business.

F. H. Peavey & Co., Minneapolis, are preparing for the erection of a 1,750,000-bushel elevator in North-east Minneapolis. The contract was given to Tromhauser Bros., who will have it completed by September 1.

The proposed erection of office, warehouse and elevator buildings is under consideration at Fargo, N. D. The proposed elevator will be 30x70 feet in size, 32 feet in height, built of heavy cribbing and sheathed with iron.

The E. H. Pease Manufacturing Company have just furnished a complete outfit of machinery for the new elevator being built by Frank Kaucher, St. Joe, Mo., for the Busby & Smith Grain Company at McCune, Kan.

A man was killed in the grain warehouse occupied by Jas. J. Corner & Co. at Baltimore, Md., by a falling elevator, and the widow is bringing suit to recover \$40,000 damages from the grain dealers and the property owners.

The question of constructing new railroad lines and improving shipping facilities, thereby making grain handling cheaper and inducing elevator companies to locate houses at that point, is being agitated at Charleston, S. C.

N. B. Post, Fonda, Iowa, is erecting a grain elevator for which he has bought a complete outfit of machinery, including cleaners, of the E. H. Pease Manufacturing Company. A Pierce Gasoline Engine will supply the power.

The E. H. Pease Manufacturing Company, Racine, Wis., have got nicely settled in their fine new office, which they have just completed, at their factory. They are "at home" to the large number of their customers and friends.

The Monarch Elevator Company, Minneapolis, will rebuild its elevator which was destroyed by fire at Westport, Minn. It will have a capacity of 25,000 bushels. The company has the erection of other elevators under consideration.

The Angus Smith Elevator Company has been incorporated at Milwaukee, Wis., with a capital of \$25,000. Incorporators: David Vance, Angus Smith and J. Hoyt Smith. The company will do a grain handling and storage business.

North Seattle, Wash., wants an elevator, and meetings to further the erection of such are being held. Over \$40,000 has so far been subscribed, and a choice of a site is not out of mind. It is expected that a flouring mill will also locate there.

The General Fire Extinguisher Company is remodeling the sprinkler equipment of the Interior Elevator at Minneapolis to the Grinnell Dry Pipe System. The Peavey Company is spending \$10,000 in improving the fire protection on this elevator.

The Marine Elevator Company has begun the erection of its 700,000-bushel elevator at Minneapolis, the Barnett & Record Company having the contract. The house is to be completed by October 1, and will do a transfer business. It will cost \$100,000.

The Bosch-Ryan Grain Company of Davenport, Iowa, will erect on Sylvan Island, at Moline, Ill., a \$50,000 grain elevator and malthouse. The elevator will have a capacity of fifteen cars daily and the malthouse of 200,000 bushels per annum.

O. E. Runyon, a New York broker, who negotiated the sale of the plant, including elevators, etc., of Wilkinson, Caddis & Co. of Newark, and who brought suit to recover \$90,000 commission therefor, has taken his case to the Supreme Court for review.

C. B. Fox of Havre, France, is in New Orleans for the purpose of establishing an export business in grain at that port. He said that New York, Boston, Baltimore and Philadelphia were the chief exporting cities of the United States, because they possessed the facil-

ities for handling export stuff with dispatch, and that the lack of such facilities would have to be overcome in New Orleans before that city would make great advances in increasing her export business.

McCray & Morrison, Kentland, Ind., write us that that they are building an elevator at Beaver City, Ind. They are also making additions to their houses at Raub and Effner, Ind. The elevator at Raub will be increased in capacity to 50,000 bushels.

Judge Tuthill of Chicago, Ill., has issued licenses to the Chicago Railway Terminal Elevator Company of New York to operate the Union, Iowa, City, Fulton, St. Paul, the Air Line and Galena elevators at Chicago, \$10,000 being the bond paid for each.

H. M. Carlton and Bert and Leslie, his sons, formerly of Warren, Ill., are now engaged in the grain and feed business at Colorado Springs, Colo. They have three different warehouses, including one at Cripple Creek which is more than 11,000 feet above sea level.

Elevators A1 and A2, heretofore operated by the Terminal Elevator Company at Minneapolis, have been leased by G. W. Van Dusen & Co., and will continue under the management of W. G. Ainsworth. These elevators have a storage capacity of about 2,000,000 bushels.

At the annual meeting of the Union Elevator Company, Council Bluffs, Iowa, held recently, the following officers were elected: T. L. Kimball, president; A. J. Earling, vice-president, and H. A. Snyder, secretary and treasurer. A board of directors was also elected.

Charles Zimmerman of Zimmerman & Roath, Oak Park, Ill., is now buyer for S. W. Edwards & Son, commission merchants and members of the Chicago Board of Trade. Mr. Zimmerman will be at Earlville, Ill., at which place the Chicago firm may erect an elevator.

S. S. Daish and J. B. Daish, forming the company of S. S. Daish & Son, grain and hay dealers of Washington, D. C., have dissolved partnership and have been succeeded by S. S. Daish & Son, incorporated. They have a paid-up capital of \$75,000, and will continue the business of the old company.

Iris Bradley, formerly a well-known merchant at Colusa, Ill., has pleaded guilty to theft of 10,000 bushels of grain at Carthage, Ill., and has been sentenced to two years in the penitentiary. There must have been quite a tangible shortage in Carthage when that amount of grain disappeared.

Honstain Bros., Minneapolis, Minn., have obtained the contract for building five country elevators for Peavey & Co. on the Omaha road. They will be of about 20,000 bushels' capacity each and will use gasoline engines for power. Three of them will be situated in Nebraska and two in Iowa.

Lasier, Timberlake & Co. are building a 150,000-bushel capacity elevator on Goose Island at Chicago, Ill. The new elevator is being built as an addition to the old one which is also being remodeled and undergoing thorough repair. The work is being done by the Seckner Contracting Company.

The Freeman Milling Company's elevator to be erected at Superior, Wis., will be 50x170 feet in size and will have a capacity of about 250,000 bushels. It will be equipped with the latest improved machinery. The contract has been let to La Doux & Co., who will push the work to rapid completion.

The Great Western Elevator Company at Minneapolis, Minn., at the head of which is A. D. Mulford, has purchased five houses of the Northern Pacific Elevator Company. These elevators are located at Arthur, Hunter, Blanchard, Mayville and Hatton, and range from 70,000 to 75,000 bushels' capacity.

The Monarch Elevator Company's agent at Glenwood, Minn., P. M. Ferguson, has given notice that after August 1 barley, flax, corn, oats and wheat will be bought by him. This is somewhat of a new departure for elevator companies in that section and was welcome news to the farming community.

The Jacob Weschler estate, Erie, Pa., are erecting another storage elevator of 250,000 bushels' capacity. They are also enlarging their malt house to 750,000 bushels' capacity. It will be equipped with all modern improvements, including barley cleaning machinery and a new steeping and barley washing system.

The Chicago O'Neil Grain Company has been incorporated at Chicago with a capital stock of \$300,000. The incorporators are C. R. Holden, M. H. Guerin and I. H. Meyer. As announced in our last issue the company will erect a large elevator at South Chicago, for which Simpson & Robinson have the contract.

Estes Bros., Opdyke, Ill., dealers in grain implements, hardware, etc., write us that the report that they had been succeeded by W. H. Estes & Co., dealers in general merchandise at that place, is without foundation, as they have no connection with that firm and do not contemplate retiring from a lively business.

The Lake Superior and Union Improvement Elevator Companies, which failed a year ago, have been reorganized under the laws of New Jersey with a capital stock of \$1,000,000. The companies will control their two terminal elevators at Duluth and the Northern

Pacific Elevator Company's houses in Minnesota and Dakota.

The grain and flour firm of Tate, Hinrichs & Co., Baltimore, Md., which went into liquidation some time ago, has been succeeded by the Joseph Tate Company, and has been incorporated under that name by Joseph Tate, W. J. Hooper, Wm. C. Rouse, J. W. Putts and W. B. Swindell. The company is capitalized at \$25,000.

L. I. Aaronson, representing a syndicate of Chicago and Pittsburgh capitalists, has purchased ground for the erection of a 1,000,000-bushel elevator at South Chicago, Ill. Work is to begin at once, and the cost will be \$200,000. Another syndicate is negotiating for a site at South Chicago for three new elevators of 650,000 bushels' capacity each.

The Berger-Sanderson Company, grain commission merchants at Minneapolis, has changed its firm name to the Berger-Crittenden Company, the style under which it carries on a business at Milwaukee. J. H. Crittenden will take care of the Milwaukee business, while Harry Berger will assume the management of the Minneapolis house. Alexander Berger has gone to Colorado.

A large farmers' elevator is to be built at Sioux City, Iowa. F. H. Peavey & Co., the Bonus-Milner Milling Company and others have the project under consideration. It is proposed to erect a house of 150,000 bushels' capacity, equipped for handling all kinds of grain, including corn and flax, and to put in a corn shelling plant. It is expected that work will soon be commenced.

James Cole, Bushnell, Ill., has discontinued his grain business at that place, having sold out to Buckley, Pursley & Co. of Peoria, which company operates fifty-two elevators in Illinois. W. L. Pursley will be in charge of Mr. Cole's former business and will have a new office and improve his plant. Mr. Cole is still in the grain business at Blanchard, Iowa, and Westboro, Mo.

Mezgar & Co., who recently purchased elevators and went into the grain business at Dwight, Ill., are building up a good business. They have already shipped from one of their elevators, of which they have been in possession about three months, 50 cars of corn and 80 of oats. From another, the Three-I Elevator, which they have had about a month, 16 cars of grain have been shipped.

C. R. Foster, secretary of the Board of Trade of Garrison, Costilla county, Colo., writes us that that new and thriving town could give a good trade to an elevator. The town is situated in a fine valley of about 150x50 miles, in which there are but four flouring mills and not one elevator. Garrison shipped 250 cars of grain last season, all of which was hauled from the threshers and loaded in the cars in sacks.

Chicago is rapidly increasing her elevator capacity, especially in the district known as South Chicago, and a new departure for the city is a salt elevator. About 100,000 tons of salt in bulk is expected to be shipped from Buffalo to Chicago this season on lake steamers, and the new elevator at South Chicago, constructed on the same principle as grain elevators, will take care of that large traffic. Hitherto salt has been shipped to Chicago by rail.

Farmers in the vicinity of Oneida, Ill., have organized for the erection of a grain elevator. At a recent meeting the following officers were elected: J. A. Finley, president; Benj. Dayton, vice-president; Hugh Greig, secretary, and Andrew McCormack, treasurer. A stock company was organized, with a capital of \$2,500, and the directors were instructed to confer with contractors and railroad officials. A fund of \$2,098 has been subscribed for a building.

The Red River Valley Elevator Company's line of elevators has been sold to the St. Anthony and Dakota Elevator Company. G. W. Van Dusen & Co. bid \$180,000, and in virtue of this being the highest bid the elevators belonged to Van Dusen & Co., but the St. Anthony and Dakota Company meeting this bid, the control of the property was turned over to them, and they will take possession of one of the largest elevator systems in the Northwest on August 1. W. H. Dunwoody is the president and P. B. Smith manager.

The Tacoma Grain Company, Tacoma, Wash., has purchased the thirty-nine elevators in the Northwest belonging to the Northern Pacific system of the receiver of the Northern Pacific Elevator Company. The price paid has not been made public. These elevators have a total capacity of 6,000,000 bushels, and are located in Spokane, Whitman and Lincoln counties, 750,000 bushels being in Tacoma. They shipped last year 900,000 centals of wheat, which loaded 36 ships, and this year the new company expects to ship 4,000,000 centals.

The Merchants' Elevator Company have brought suit against the St. Louis United Elevator Company, at St. Louis, Mo., for \$10,000 damages. It is claimed by the Merchants' Elevator Company that defendant was employed by them to store in its elevator or warehouses 39,628 bushels of wheat, and to give such wheat the necessary attention and keep it in good and proper condition so long as it was their desire to keep it stored there. The plaintiff charges a breach of contract in that between July 1 and July 30 the de-

fendant did not give the wheat proper attention to keep it in good condition, but allowed it to become heated so that its market value was destroyed. A demand was made upon the defendant for damages, but was refused, and interest is now asked from Jan. 1, 1890.

ITEMS FROM ABROAD

The wheat crop of France is estimated at 328,000,000 bushels, against 288,000,000 bushels last year.

England's wheat crop is estimated at from 60,000,000 to 64,000,000 bushels against 50,200,000 bushels last year.

The 1894 crop of wheat for India is officially estimated to be 10,000,000 bushels less than that of last year. The crop of 1893 amounted to 266,000,000 bushels; of 1892, 206,000,000 bushels.

The Mexican government has issued a report saying that Mexico will experience a corn famine this year if more rain is not had. The wheat yield is also expected to be light, especially in the northern states.

Although India grows a great deal of rice and wheat, millet is said to be a more important crop. It occupies about 83 per cent. of the food grain area of Bombay and Sind, and 41 per cent. in the central provinces, in all about 30,000,000 acres.

Switzerland imported during the first three months of 1894 348,000 quarters (of 480 pounds each) of wheat, and 70,000 sacks of flour. During the eight months ending March 31, the importation of wheat and flour together was equal to 190,000 quarters of wheat, against 1,140,000 quarters during the same time in 1891-92.

India exported during the 14 weeks from April 1 to July 7, 3,520,000 bushels of wheat, 2,360,000 bushels going to the United Kingdom and 1,160,000 bushels to the continent. The total shipments for the same time last year amounted to 3,460,000 bushels, 5,060,000 bushels going to the United Kingdom and 3,400,000 to the continent.

It was feared that unfavorable weather in Hungary would curtail the crops to very much below those of last year, but it is now estimated that wheat and rye will yield 15 to 16 per cent. better than last year and be excellent in quality. Winter barley is good, but below the average crop, and summer barley will yield a medium crop of poor quality.

At a recent meeting of Russian officials the question of facilitating the export of grain by reducing freight rates was considered. The officials were of the opinion, however, that instead of such a diminution in rates, which would not go into force for three months at all events, it would be of greater advantage to construct good roads leading to railroads as soon as possible, and thereby lessen the heavy cost of transporting grain from country districts to the railway lines.

Concerning the Russian crops an Odessa correspondent writes: For the first time in the history of the great national grain industry of Russia, there is a generally expressed public fear of an abundant crop, which in one sense promises to be as disastrous to the small producers as a failure. With the heavy stocks left over from last year there is no demand. In many districts the peasant producer will be compelled to sell his grain for one-third its normal value; in others the danger lies in the probability that he will not be able to dispose of his produce at any price. Owing to the extraordinary fall in prices on the foreign markets, and the large stocks still held by the grain speculators, the latter will not make the usual advances to the producers; and the speculators themselves have over-mortgaged their holdings to the banks. In numerous cases large producers in Southern Russia are offering their standing crops to syndicates, who will take over and cut the harvest for one-half, and in some cases for one-third its ordinarily estimated value; but even these offers are not taken up.

OUR CARD BASKET

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

- H. Work of Work & Co., Ellsworth, Kan.
- M. F. Seeley of Seeley, Son & Co., Fremont, Neb.
- Harry Wolf of Aug. Wolf & Co., Chambersburg, Pa.
- J. Silas Leas of the Barnard & Leas Mfg. Co., Moline, Ill.
- J. W. Vaughan, representing the Novelty Iron Works, Dubuque, Iowa.
- L. S. Hodgeboom, representing The Knickerbocker Company, Jackson, Mich.
- B. F. Ryer, representing Huntley, Cranson & Hammond, Silver Creek, N. Y.
- H. E. Richardson, representing The Prinz & Rau Manufacturing Company, Milwaukee, Wis.

WATERWAYS

The Nicaragua Canal bill has been approved by the house committee on commerce and ordered to be reported.

Steamer Henry Bailey sank in 15 feet of water off Seattle recently, and her cargo of 733 sacks of oats are a total loss.

During the month of June 8,151,116 bushels of wheat, 521,105 bushels of corn and 1,098,429 barrels of flour passed over the "Soo" Canal.

St. John, N. B., is placing herself in opposition with Halifax as a winter port and is protesting against a proposed subsidy for improving the harbor of Halifax for further accommodation.

Senator Gorman is asked to present to Congress a resolution providing for the appointment of a committee to decide as to the best and most available route for the proposed Maryland and Delaware Canal.

The bill authorizing an appropriation of \$25,000 for the survey of the contemplated canal connecting Lake Erie with the Ohio River passed its second reading and is now in the hands of the committee of commerce.

The Baltimore, Md., Exchange is considering the question of petitioning Congress to deepen their harbor to 30 feet, and give it a uniform width of 1,000 feet. At present the channel is 28 feet deep and 800 feet wide.

A Chicago agent of a lake line recently offered a rate of 1 cent a bushel and a rebate of \$100 to any shipper who would ship 60,000 bushels of corn to Buffalo. This is the lowest rate on record, but it failed to attract any grain.

Do the promulgators of extensive canal systems ever consider the cost? One of the projects taken before Congress is for a waterway connecting Lake Superior with the Mississippi River. To construct it would entail an expenditure of \$200,000,000.

A dispatch from Washington says that a bill to appropriate \$10,000 for a survey of the proposed waterway connecting the Red River of the North with the Minnesota River, and through other streams reaching Hudson Bay, has been favorably reported upon.

Engineers are making a survey for a route for the proposed canal connecting Georgian Bay with Lake Ontario. The company who have this project in hand have opened offices at Toronto, and expect soon to begin the work of excavation about 8 miles from Toronto.

At the recent Constitutional Convention at New York an amendment was proposed authorizing the issue of bonds to the extent of \$12,000,000 for canal improvement, thus giving the state the control of the waterways. Another amendment, turning the canals over to the general government, was proposed.

The old question of deepening the St. Lawrence and other Canadian canals is again receiving attention. For the third time the project was brought before the house at Ottawa and for the third time rejected. The cost of deepening these canals to the depth of 20 feet is variously estimated at from \$67,000,000 to \$100,000,000.

A movement is on foot for pushing the project for a canal through the San Joaquin Valley to connect Stockton with Bakersfield, Cal. Instead of attempting to get business men to invest in the scheme the legislature will of course be asked to appropriate funds. What level-headed business men do not see fit to invest in is generally referred to the whole people.

In Washington they go at a canal in a business-like way, which is very commendable. The Seattle and Lake Washington Waterway Company has been incorporated with a capital stock of \$3,000,000. The incorporators are: E. P. Ferry, Eugene Semple, D. E. Durie and others. The company's scheme is to connect Lake Washington with Seattle by a ship canal.

Erie Canal boat captains have formed an association at Buffalo, N. Y., for the purpose of securing higher freights and the rate on wheat to New York was at once raised from 2½ to 3 cents, with other grain in proportion. It is claimed that rates had been reduced to less than the cost of running expenses and repairs by the competition between the various canal forwarders.

A public meeting was held at Baltimore, Md., June 24, to further the project of a ship canal connecting Chesapeake and Delaware Bays. Resolutions were adopted appointing a committee of twenty-one and empowering it to further the project by selecting the route, etc., and to report to the city council. This canal, if ever completed, will cost upward of \$20,000,000 and is expected to save Baltimore export shippers 24 hours, or a distance of about 200 miles. This is another abandoned hope in the shape of a waterway. The government appropriated money for the "pre-

liminary survey" as long ago as 1878, and since then seven surveys have been made.

As it has been thought advisable to have but one adjuster to look after the interests of underwriters on grain cargoes instead of an adjuster for each company, one adjuster at Buffalo now represents nine of the twelve insurance companies doing business on the great lakes. He will make adjustments on all damaged grain arriving at Buffalo which is insured by any of these companies.

During the nine months ending November, 1893, wheat was received at Chicago over the Illinois and Michigan Canal to the amount of 85,830 bushels, corn 1,226,513 bushels, oats 631,100 bushels, rye 100 bushels, grass seeds 10,800 pounds. The shipments of wheat from Chicago over that route during the ten months ending November, 1893, amounted to 287,480 bushels, corn 5,002 bushels. During the year 1893 there were 82 boats running and a tonnage of 529,816 transported.

The Society of Engineers of Indiana has petitioned Congress to provide for a preliminary survey for a ship canal connecting Lake Michigan with the Wabash River and to restore such portion of the Wabash and Erie Canal as may be advantageous to continue the waterway to Lake Erie. To carry out this modest demand would require a couple of million dollars. This latter scheme is practically a revival of the old Wabash Canal enterprise which cost the country millions of dollars and was long since abandoned.

The house committee on railways and canals at Washington is in travail over the project of a ship canal from the Mississippi River to Lake Superior. With one route the canal starts at St. Paul, Minn., follows the river to near its head and goes through a chain of lakes to Duluth, describing a complete semicircle. It is claimed that on the 500,000 barrels of flour shipped from Minneapolis to points on this proposed route the saving would be 10 cents per barrel. The estimates on the cost of the waterway vary from \$5,000,000 to \$10,000,000.

Electrical experts have figured out that electrical power cannot be transmitted economically any great distance, and that there would be no profit in competing with steam where difficulty in transmission is experienced. The cost of delivering electrical power from Niagara along the Erie Canal is said to be \$20.79 per horse power; the authorities have contracted to furnish it for a sum not to exceed \$20. It has been figured that the total cost of a round trip of a canal boat would amount to \$86 when electricity is used, against \$50 as at present. If these figures are not in error the bulk of tonnage on the Erie Canal will very likely be moved by the old motive power.

OBITUARY

D. G. McClure, an elevator man of Morgan, Mich., is dead.

B. F. Cornish, dealer in grain, etc., at Nantucket, Mass., is dead.

Edgar Blaisdell, a dealer in grain and lumber at Weston, Ill. is dead.

Martin Newcomer, dealer in grain and feed at Glendive, Mont., is dead.

R. R. Laughlin, of the grain firm of R. R. Laughlin & Son at North Yamhill, Ore., is dead.

W. A. Watson, a member of the firm of Reynolds & Watson, grain and coal dealers at Gifford, Ill., died recently.

James A. Wright, a grain merchant at Germantown, Pa., died June 7 in his 79th year. He was the senior member of the old firm of Peter Wright & Sons, whose traffic extends to all parts of the world.

James A. Smith, the senior member of the grain firm of Smith & Thompson, died at Hastings, Minn., June 14, at the age of 62 years. He was a pioneer grain man of that section and his loss is greatly regretted.

Thomas Ellis, an old member of the New York Produce Exchange, doing a speculative business in grain flour, and died at his home in Cincinnati, Ohio, June 8. He retired from business about five years ago.

An old familiar character has disappeared from the Board of Trade of Chicago. Joseph Hudlum, a negro who had been the janitor for that institution since 1855, died on June 17. His funeral was attended by many brokers and Board of Trade men. Joe was no speculator and was quite willing to take the sweepings of the floor as his reward. He saw many firms cornered in his time and many a strong man break down. As for him, he left a little fortune of \$16,000.

The United States Supreme Court has decided that witnesses can be compelled to testify and introduce their books in Interstate Commerce Commission cases. This will have a tendency to check the private cutting of freight rates.

PERSONAL

F. H. Peavey, of Minneapolis, has gone on a two months' trip to Europe.

F. G. Holbrook, a grain dealer at Minneapolis, has been appointed postmaster.

Mr. Ed. Murphy will have the management of the new grain elevator at Tuscola, Ill.

Nels Pearson, formerly of the Northern Grain Company, Hayward, Wis., has started for his old home in Sweden.

Isaac Coffin of the Belt Line Elevators, Duluth, and Miss Bridgeman of Jackson, Mich., were married recently.

L. Montgomery succeeds John Moeller as manager of the Crowell Lumber and Grain Company at Scribner, Neb.

Paul M. Barnett, Henderson, Ky., has accepted a position as grain buyer for Bartlett, Kuhn & Co. at Evansville, Ind.

W. H. Small, a member of the firm of W. H. Small & Co., grain dealers at Indianapolis, Ind., was married to Miss Gleichman June 21.

Morris Cahill, formerly check weighman at the Union Coal Company's mine at Peru, has taken charge of the new Ladd Elevator at Ladd, Ill.

S. D. Wester, who had been in the grain commission business at Chattanooga, Tenn., for eighteen years, has gone West, and will locate in Salt Lake City.

Captain Wm. M. Price, formerly a commission merchant and supervising inspector of grain at Kansas City, is now deputy chief grain inspector at St. Louis, Mo.

Alexis Caswell, an old elevator man formerly of Milwaukee, has become superintendent of the C., M. & St. P. R. R. Elevator "B" at Minneapolis, succeeding D. R. May.

Ote Davis, for the past ten years traveling salesman for the new Douglas Flour Company, has accepted the position of manager for Paddock, Hodge & Co., the Toledo, Ohio, grain firm.

E. E. Mitchell, Minneapolis, Minn., formerly superintendent of the Red River Valley elevators, has accepted a position as superintendent of the country houses of the Great Western Elevator Company.

J. D. Kitt, formerly grain agent for the Marfield Elevator Company at De Smet, S. D., has been promoted to the position of manager of the company's cleaning station at Parker. Mr. Kitt is a member of the city council at De Smet, S. D.

THE BEAR'S PURSUIT.



The bear's a very modest brute,
And ever since his birth,
He's only followed one pursuit,
That is to get the earth.

He seems to have a title free
To every thing of worth;
The bull will have to climb a tree,
And leave the bear the earth.

—From Circular of J. F. Zahm & Co.

Fires, Casualties, Etc.

Seth Paull, Bristol, R. I., has lost his grain and coal house by fire. He carried insurance.

An elevator at McGregor, Iowa, was recently fired by spontaneous combustion, it is presumed.

The C. J. Searles Company, Vicksburg, Miss., dealers in grain and produce, have been burned out.

The Dayton and Michigan elevator at Toledo, Ohio, was destroyed by fire June 22, at a loss of \$35,000.

Goodall, Walker & Co.'s distillery at Grant, Ore., has been swept away by the floods. Loss \$75,000.

The report that Clausen's elevator at Clear Lake, Iowa, was demolished during a windstorm is denied.

Dick Bros' brewery at Quincy, Ill., was damaged by fire recently to the extent of \$34,000. Fully insured.

A fire at Point St. Charles, Montreal, June 21, destroyed 600 tons of hay, at a loss of several thousand dollars.

During a windstorm at Madison, Ind., the Trow Milling Company's elevator suffered a loss of part of its tin roof.

Wheeler & Howes' grain and hay warehouse at Bridgeport, Conn., was destroyed by fire June 26 at a loss of \$15,000.

A grain elevator at Buffalo, N. D., was destroyed by fire June 27, together with considerable wheat stored therein.

The Northern Pacific Elevator at Cheney, Wash., was destroyed by fire recently, together with about 7,000 bushels of wheat.

An elevator at Okoboji, Iowa, was blown down during a recent windstorm. Elevators erected by country barn builders are sensitive to gentle zephyrs.

Lightning struck and set fire to an elevator at Lime Springs, Iowa, recently, but as the blaze was seen at once the building was saved without sustaining great damage.

One of P. Maguire's large hay barns at Remington, Ind., together with about 350 tons of baled hay, was recently destroyed by fire. Loss about \$3,000; partially insured.

A floor in Seyk's grain warehouse at Kewaunee, Wis., recently gave way and allowed a couple of thousand bushels of oats through. The loss is not great, as the grain can be saved.

Marr & McLaughlin's elevator at Garrett, Ill., was blown down June 21. If country barn builders could only be sure of the moderation of the elements their species would increase and multiply.

The Springfield Milling Company's elevator at Springfield, Mo., took fire from being struck by lightning June 18, and suffered a loss of \$600, which was covered by insurance in mutual companies.

The elevator belonging to Adolph Brenchard at Greenville, Ill., was recently set on fire by sparks from a passing locomotive. The building with its contents, grain valued at \$6,000, was consumed. Total loss \$18,000; insurance \$9,000.

The elevator at Absaraka, N. D., belonging to Cargill Bros., and which contained 600 bushels of wheat, was struck by lightning June 21 and burned to the ground. The building was fully insured, but it will probably not be rebuilt.

Fire broke out in the Woodruff Storage Warehouses, Brooklyn, N. Y., June 29. The building contained 15,000 bales of jute and a large quantity of wheat, etc. The building and contents was destroyed, but is said to have been insured.

McGill's elevator at Milford, Ill., burned to the ground on the night of July 12. Only a small amount of grain was in store at the time. A warehouse belonging to C. E. Wilcox was also destroyed. McGill's loss is estimated at \$8,000, Wilcox's at \$500.

The C. R. I. & P. Elevator at Chillicothe, Ill., operated by L. S. Hoyt, was burned last month with 20,000 bushels of corn and wheat and 3,000 bushels of oats. Loss about \$15,000; insurance \$3,000. Mr. Hoyt is selling the damaged grain at 15 cents per bushel.

A mammoth grain warehouse covering an acre of ground, and built with corrugated iron, collapsed recently at Chattanooga, Tenn. When such a building falls to the ground it makes a picturesque ruin, and when its construction is attempted by country barn builders it is likely to do so.

The Central Elevator Company's elevator at Humboldt, Iowa, was destroyed by fire last month. Together with the elevator the fire consumed two large hay barns, coal sheds, corn cribs, etc. About 1,000 bushels of corn, 800 bushels of oats, 400 tons of baled

hay, and about 100 tons of coal were destroyed. The total loss is estimated at about \$30,000, insurance \$12,000. E. L. Chase, who owned the hay, suffers the greatest loss as he carried no insurance. The cause of the fire is unknown.

The Rock Island Elevator, operated by Talpey Bros. at Kansas City, Mo., was totally destroyed by fire June 28, at an estimated loss of \$25,000, which was covered by insurance. It will be rebuilt and probably increased in capacity to 500,000 bushels. The house had been empty for two months.

The barn of M. V. Beiger, near Mishawaka, Ind., was destroyed by fire recently. There was in the barn about 1,500 bushels of corn, 400 bushels of wheat, 100 tons of hay, 400 bushels of oats, some animals and agricultural implements, all of which were lost. The loss is estimated at \$8,000; insurance \$4,500.

The elevator at New Berlin, Ill., belonging to Maxwell & Son, and operated by E. R. Ulrich & Son, was destroyed by fire June 23, together with about 3,000 bushels of corn in the ear and two carloads of shelled corn. The loss on the building is about \$7,000; insurance \$3,000; the loss on grain stored, about \$1,000, was fully covered by insurance.

A peculiar accident occurred at Newton, Mass., early in the morning of June 28, by which the feed mill and elevator of H. W. Crowell was completely demolished, entailing a loss of several thousand dollars. A west-bound freight train threw several heavily loaded freight cars to the flying switch and into a yard used by Newton and a coal company. Two of the cars thus sidetracked left the rails and bumped up against the elevator building. The weight of grain in the upper floors of the building made it top-heavy, and when the cars bumped into its side it seemed to be lifted from its foundation and carried over by its own weight. The building was built of wood and slate, four stories high, and represents a loss of \$900. The loss on machinery is \$1,500. There were stored in the building 3,000 bushels of oats, 700 bushels of corn, 11 tons of shorts, 50 bags of meal, 50 bags of cracked corn, etc. This is scattered about in every direction, but as about one-half can be saved the loss will not exceed \$2,000.

SEED EXPORTS AND IMPORTS.

Seeds valued at \$55,367 were exported during May, according to the report of the Bureau of Statistics, against an amount valued at \$119,882 exported during May, 1893; and during the eleven months ending with May seeds valued at \$7,930,321 were exported, against an amount valued at \$3,840,006 exported during the corresponding months ending with May, 1893.

Clover seed amounting to 137,318 pounds was exported in May, against 52,274 pounds exported in May, 1893; and during the eleven months ending with May 45,417,833 pounds, valued at \$4,540,772, were exported, against 8,022,446 pounds, valued at \$958,423, exported during the corresponding months ending with May, 1893.

There was no cotton seed exported in May, against 586,182 pounds exported in May, 1893; and during the eleven months ending with May 5,332,516 pounds, valued at \$41,033, were exported, against 4,431,537 pounds, valued at \$35,025, exported during the eleven months ending with May, 1893.

There was 1 bushel of flaxseed or linseed exported during May, against 42,621 bushels in May preceding; and during the eleven months ending with May 2,047,834 bushels, valued at \$2,426,280, were exported, against 1,739,771 bushels, valued at \$2,082,117, exported during the corresponding months ending with May preceding.

Timothy seed aggregating 788,892 pounds was exported in May, against 570,365 pounds in May, 1893; and during the eleven months ending with May 10,034,397 bushels, valued at \$444,110, were exported, against 7,066,359 pounds, valued at \$504,514, exported during the corresponding months ending with May, 1893.

Other seeds aggregating an amount valued at \$9,583 were exported during May, against an amount valued at \$16,357 exported during May 1893; and during the eleven months ending with May other seeds valued at \$478,126 were exported, against an amount valued at \$259,927 exported during the eleven months ending with May, 1893.

Flaxseed aggregating 136,887 bushels, valued at \$188,117, was imported during May, against 39,719 bushels, valued at \$49,757 imported during May, 1893; and during the eleven months ending with May 417,630 bushels, valued at \$536,898, were imported, against 100,158 bushels, valued at \$131,952, imported during the eleven months ending with May, 1893. Other seeds valued at \$12,575 were imported during May, against an amount valued at \$8,124 in May, 1893; and during the eleven months ending with May other seeds valued at \$351,671 were imported, against an amount valued at \$491,446 imported during the corresponding months ending with May, 1893.

An appropriation of \$800 has been secured for experimenting in the cultivation of flax and hemp in Washington. It is said that there is not enough flax produced to supply the European demand.

THE EXCHANGES

On June 16 the cornerstone of Detroit's new Chamber of Commerce building was laid, attended with elaborate ceremonies.

The matter of buying up memberships, and thereby enhancing the value of those held, is being agitated at the Minneapolis Chamber of Commerce.

At the last regular monthly meeting of the Baltimore Corn and Flour Exchange a committee reported that they were making progress on the clearing house scheme.

A committee on the Chicago Board of Trade will arrange with warehouse commissioners and elevator owners to make an examination of all wheat now in store at Chicago.

At the annual election of officers of the Indianapolis Board of Trade held June 18 the following gentlemen were elected: Geo. W. Sloan, president; I. S. Gordon, vice-president; John Osterman, treasurer.

Arrangements have been made at the Winnipeg Grain Exchange to institute an associate membership. This class will consist of non-resident grain men, who will be admitted to membership at a low rate without the privilege of voting.

At the last meeting of the Washington Grain Exchange, Washington, D. C., the following officers were elected: W. H. Tenney, president; G. A. Myers, vice-president; E. W. Watkins, secretary and treasurer. A new board of directors was also elected.

The secretary of the Chicago Board of Trade announced, June 23, that the board would make no further efforts to compromise with elevator men. All contracts made on the board will be protected, he said, and sufficient storage room provided.

The Chicago Board of Trade has decided to change Rule IV so as to give its directors power to cancel and purchase memberships at their discretion when the price does not exceed \$1,000, and for which members may be assessed not to exceed \$10 in a year.

The Pittsburg Grain and Flour Exchange held its annual meeting June 12 and elected a board of directors for the ensuing year. In his report the president said that the Pittsburg grain and flour dealers were greatly handicapped by insufficient weighing facilities.

It is suggested that the hay dealers of Kansas City organize a Hay Exchange. Kansas City hay men have a good organization in the Hay Dealers' Association, but it is thought that an Exchange might aid in ameliorating some of the conditions that are injurious to the trade which the association cannot reach.

At a special meeting of the directors of the Chicago Board of Trade and of the Toledo Produce Exchange, resolutions were adopted expressing approbation of the effective measures adopted by President Cleveland for the protection of the commerce and postal facilities of the country against lawless strikers, rioters and anarchists.

Chicago Board of Trade members have adopted the rule that all sales of flaxseed will be made upon the basis of pure seed, unless otherwise agreed. That is to say, seed tendered or delivered on contracts may carry impurities or foreign matter, but must contain the sale quantity of pure seed, and the payment required be only for such pure seed.

The cornerstone of the new Board of Trade at Duluth, Minn., was laid June 26. It was attended with Masonic ceremonies and ended with a banquet. The new building will be a cut brown stone first story and red pressed brick above. It will be seven stories high, absolutely fireproof in construction. The Duluth Board of Trade was organized in 1881 by nine business men, and last February it was burned. It has a membership of 185.

It is reported that European buyers have contracted for supplies from Argentina as far ahead as the grain crop deliveries run, or until nearly the time for the new crop to be harvested, at the same prices as spot wheat is selling for there, thus saving the large carrying charges, which are added here to the price of cash wheat.

A business man has given his opinion of the Anti-option Bill. He says that the anti-option men want the producers of 500,000,000 bushels of oats and 2,000,000,000 bushels of corn every year to "wait on their farms until someone comes with the money to buy them at his own price, if at all, or until some factor will advance the money to move them to a market in which there is no ascertainable value. The whole thing is simply preposterous and out of argument, and only captivating to a theorist unacquainted with business methods."

CROP : CONDITIONS.

INDIANA, KENTLAND, NEWTON Co., June 21.—The prospect for an oat crop is very fair. McCRAV & MORRISON.

NEBRASKA, ARAPAHOE, FURNAS Co., July 10.—We are having some rain and corn is looking very good considering that there is a very large acreage planted. If there is a good crop there will be plenty of work for corn pickers in this part of the country. A. P. HYATT.

OHIO, BELMONT, BELMONT Co., June 27.—Wheat is in good shape here. Farmers have commenced cutting and a good yield is anticipated. Corn is not as good as it might be, and oats will yield fair. The price of wheat here is 50 cents, oats 40 cents and corn 50 cents. J. D. MICKEY.

WISCONSIN, NEW GLARUS, GREEN Co., July 9.—Wheat is in good condition and a big crop is expected. Oats need rain badly, and if we do not get it soon we will not get a heavy crop. Corn is in good condition so far and a big crop is expected. Farmers are holding quite a lot of oats for seed on account of poor oat crop. OTTO A. PRELLWITZ.

FLAXSEED.—According to the best informed authorities the area devoted this year to flaxseed is larger than that of any year since 1891, when the production was officially estimated at 15,455,000 bushels. Owing to the long continued depression in the value of wheat a large number of farmers have turned their attention to flaxseed, with the result of an increase in the acreage of fully 20 per cent. in 1894 over that of 1893. Last year about 1,250,000 acres were cultivated, and basing the yield on the usual average of 8 bushels of seed to the acre, the crop of 1893 reached a total of about 10,000,000 bushels. Of this production about 1,500,000 bushels were reserved for planting and other purposes. The crop of 1894 has progressed under generally favorable conditions. Some difficulty was experienced in procuring the required sowing seed, and for that reason the growing crop is less extensive than it would otherwise have been.

KANSAS CROPS.—The report of the Kansas State Department of Agriculture says: Taking the assessors' returns already received, showing the acreage sown in all but thirteen counties, in connection with the present estimates of acreage that will be harvested and the yield per acre, and applying the same ratios of acreage and yield to the other thirteen counties, the result indicates a crop for the entire state of 28,320,000 bushels from 4,726,707 acres sown, or an average of 10.62 bushels per acre for the estimated 2,666,671 acres that will be actually harvested. This is an increase of 3,685,440 bushels, or 15 per cent. above the total yield in 1893. Reports on spring wheat show but poorly for the acreage to be harvested or the yield; there will be but little. This has not been a spring wheat nor oats year, and of oats there will not be enough to exceed a half crop. The yield of rye per acre will not vary essentially from that of winter wheat, and the quality is good. Without exception reports indicate that Kansas presents at this time an area of growing corn the equal of which for extent, evenness of stand, vigorous growth, propitious soil conditions and freedom from weeds has seldom if ever been seen before in any state. The acreage appears to have been increased during the month 10 per cent., and perhaps more, by planting ground upon which oats, spring wheat, etc., had made an unpromising start. The condition of the crops is given in percentages of what is accounted a good average. Barley, 48; broom corn, 87; castor beans, 90; flax, 85; millet, 84; sorghum, 88; clover, 74; timothy, 65; blue grass, 80; alfalfa, 86; prairie grass, 80.

GOVERNMENT CROP REPORT.—The July returns to the statistician of the Department of Agriculture shows the following: Condition of corn 95; winter wheat, 83.9; spring wheat, 68.4; all wheat, 79.3; oats, 77.7; winter rye, 93.9; spring rye, 81.7; all rye, 73; barley, 76.8; rice, 91.1; potatoes, 92.3. The preliminary acreage of corn as reported by correspondents shows 106 per cent. as compared with the acreage of 1893, being an increase in round numbers of 4,000,000 acres, or 76,000,000 acres, against 72,000,000 last year; the averages of the principal states are: Ohio, 101; Michigan, 102; Indiana, 103; Illinois, 104; Wisconsin, 102; Minnesota, 116; Iowa, 108; Missouri, 109; Kansas, 110; Nebraska, 118; Tennessee, 104; Texas, 105; Kentucky, 102. The average condition of corn is 95, against 93.2 last July. The averages in the principal states are: Ohio, 92; Indiana, 96; Illinois, 99; Iowa, 100; Missouri, 101; Kansas, 96; Nebraska, 96; Texas, 94; Kentucky, 90; Tennessee, 89; Michigan, 93. The condition of the winter wheat is 83.9, against 83.2 in June and 77.7 last year. The percentages of the principal states are as follows: New York, 77; Pennsylvania, 98; Kentucky, 88; Ohio, 96; Michigan, 92; Indiana, 95; Illinois, 94; Missouri, 91; Kansas, 56; California, 51; Oregon, 97; Washington, 90. The condition of spring wheat is 68.4, against 88 in June, and 74.1 in July, 1893. The fall since last report is nearly 20 points. State averages are: Minnesota, 74; Wisconsin, 95; Iowa, 78; Kansas, 69; Nebraska, 40; South Dakota, 44; North Dakota, 68; Washington, 85; Ore-

gon, 98. The average condition of both winter and spring wheat or all wheat for the country is 79.3 per cent.

BARLEY.—D. H. Stühr of Davenport, Iowa, writes to the Cincinnati *Price Current*: Long-continued drouths and chinch bugs have changed the situation very much in most sections during the last three or four weeks. Instead of looking for a large crop (even with rains of late) we can only expect to see 60 per cent. of an average crop (mostly light weight barley) in Iowa, South Dakota and Southwestern Minnesota, with Nebraska very near failure of crop; Eastern and Southeastern Minnesota and Wisconsin on an average at present report splendid stand, and expect to harvest a heavy crop, which they no doubt will, provided the weather is favorable until harvested. We can very closely estimate the yield of 1894 crop, which I think will be about 75 to 80 per cent. of an average crop. The acreage is about the same as last season.

Latest Decisions.

Liability of Telegraph Companies.

A telegraph company cannot relieve itself from liability for mistakes or delay in the transmission of messages, caused by the negligence of its employees, by a condition on its blanks that it will not be so liable unless the message is repeated.—*Wertz vs. W. U. Tel. Co., Supreme Court of Utah, 33 Pac. Rep. 136.*

Liability of Warehouseman for Loss of Goods.

A warehouseman, having a large quantity of goods in storage, removed from the warehouse at the expiration of his lease, and the new lessee was submitted as custodian of the goods without the owner's consent. Subsequently they discovered that some of the goods were missing, and they sued the original warehouseman on the warehouse receipts. If the goods were missing at the time of the transfer to the new lessee, he was liable, otherwise not.—*Hoeller vs. Meyers, Supreme Court of Pennsylvania, 27 At. Rep. 1,061.*

Orders Cannot Be Countermanded After Delivery of Goods to Carrier.

The delivery of goods to a common carrier is generally regarded as a delivery to the consignee so far as passing title in cases of sale is concerned. To be effectual, therefore, assuming that a countermand of an order made in season would be legal, the Supreme Court of Washington holds (Whitman, etc., vs. Strand, 36 Pac. 682) notice thereof must reach the seller before the delivery of the goods to the carrier. That one has been deposited in the postoffice is not sufficient. The mail is here considered as the agent of the party sending the notice of countermand.

Unrecorded Bills of Sale.

A decision was recently rendered in the United States Court by Judge Shiras of the Western District of Iowa, in the case of E. P. Bacon & Co. of Milwaukee vs. A. W. Harris et al. of Sibley, Iowa, involving the validity of an unrecorded bill of sale. The newspaper reports are in error, as they make it appear that the unrecorded bill of sale was held by E. P. Bacon & Co. The defendant, a grain shipper at Sibley, Ocheyedan and Archer, Iowa, had given a bill of sale three years ago to the Northwestern State Bank of Sibley which had not been recorded, and plaintiffs, who had made advances based on the credit of the defendant, there appearing nothing of record against the latter, brought suit to set aside the bill of sale, which was recorded by the receiver of the bank at the time of the bank's failure. The decision was given in favor of the plaintiff, whose claim will have to be satisfied before the balance realized from the property covered by the bill of sale can be made available by the receiver, but the claim in fact is for but a small portion of the value of the property covered by the bill of sale. The case was in equity, and the decision seems a fair one. A bill of sale would of course be binding in such cases between the parties themselves, but other creditors would have no means of knowing from the records of the existence of the obligation, and in such case the court evidently deems that the suppression of evidence of such obligation should not impair the claims of other creditors.

It is surprising, but true, that the grain men of Washington, D. C., have to this day conducted their trade on the decrepit method of carting grain from the car to the warehouse instead of employing the facilities of a modern elevator. But they are now to have a new modern elevator.

When a gang of Chicago grain trimmers attempted to work on a steamer at South Chicago recently they came in contact with the local talent and met an inglorious defeat. The intruders were protected by a squad of policemen, but that did not deter the South Chicago men from manifesting a strong desire to retain their home industry.

LATE PATENTS

Issued on May 29, 1894.

MACHINE FOR REMOVING STEMS FROM BROOM CORN.—Philip Lamboy, Fonda, N. Y. No. 520,568. Serial No. 489,247. Filed Oct. 27, 1893.

GRAIN CLEANER.—Chas. J. Mober, Minneapolis, Minn. No. 520,653. Serial No. 477,636. Filed June 15, 1893.

GRAIN METER.—Henry P. Dennis, Peoria, Ill., assignor of one-half to Albertus D. Potter, same place. No. 520,518. Serial No. 482,413. Filed Aug. 4, 1893.

GRAIN SEPARATOR.—Jos. H. Creter, Newcomers-town, Ohio. No. 520,729. Serial No. 493,715. Filed Dec. 14, 1893.

Issued on June 5, 1894.

BALING PRESS.—Alva E. Anderson, Clarksville, Texas. No. 520,762. Serial No. 500,175. Filed Feb. 14, 1894.

BALING PRESS.—Henry R. Jernigan, Chariton, Ala., assignor of one-half to Jesse H. Wall, same place. No. 521,118. Serial No. 495,979. Filed Jan. 6, 1894.

SCALE BEAM.—Stephen J. Austin, Terre Haute, Ind. No. 521,074. Serial No. 484,175. Filed Aug. 28, 1893.

GRAIN CLEANING AND SEPARATING SIEVE.—Charles Closs, Webster City, Iowa. No. 520,878. Serial No. 483,198. Filed Aug. 15, 1893.

WINDLASS FOR GRAIN SHOVELS.—Jas. H. Finley, Buffalo, N. Y. No. 520,956. Serial No. 502,829. Filed March 8, 1894.

Issued on June 12, 1894.

GAS ENGINE.—Sylvanus D. Shepperd, Newark, N. J., assignor to the Backus Water Motor Company, same place. No. 521,443. Serial No. 489,213. Filed Oct. 26, 1893.

Issued on June 19, 1894.

DOG OR STP DEVICE FOR BALING PRESSES.—Andrew Schulze, Lott, Texas, assignor to the Kingsland & Douglass Manufacturing Company, St. Louis, Mo. No. 521,511. Serial No. 469,395. Filed April 7, 1893.

EXPIRED PATENTS.

[The following patents have expired since our last issue.]

GRAIN DRYERS.—Lewis S. Chichester, Brooklyn, N. Y., assignor to Geo. H. Nichols and C. W. Mills, New York City. No. 7,713. Reissued.

GRAIN SEPARATORS.—J. Shilling, Cedar Spring, Pa. No. 191,377.

GRAIN TALLIES.—P. S. Wiseman, Toledo, Ohio. No. 191,503.

HORSE POWERS.—John and Henry Kolling, Arlington Heights, Ill. No. 191,442.

GRAIN SCOURERS.—Jas. S. Hillyer, Rockford, Minn. No. 191,854.

GRAIN SEPARATORS.—J. L. Metcalfe and J. T. Metcalfe, Quincy, Pa. No. 191,991.

HORSE POWERS.—D. K. Hungerford, DeWitt, Iowa. No. 191,858.

GRAIN CLEANERS.—C. B. Slater, Blanchester, Ohio. No. 192,295.

GRAIN CONVEYORS AND DRYERS.—W. H. Higbie, Peoria, Ill. No. 192,069.

GRAIN SEPARATORS.—J. J. Hendrickson, Bridgeport, Pa., assignor of one-half to John Kinzie, same place. No. 192,260.

MALTING OF GRAIN.—J. A. Saladin, Nancy, France. No. 192,292.

HAY IMPORTS EXCEED EXPORTS.

Hay aggregating 9,308 tons, valued at \$79,609, was imported during May, according to the last report of the Bureau of Statistics, against 7,604 tons, valued at \$72,534, imported during May preceding; and during the eleven months ending with May 73,486 tons, valued at \$649,691, were imported, against 90,593 tons, valued at \$828,464, imported during the corresponding months ending with May preceding.

Of imported hay we exported none in May or in May, 1893; and during the eleven months ending with May 229 tons, valued at \$2,026, were exported, against none exported during the corresponding months ending with May, 1893.

We exported 4,224 tons of domestic hay, valued at \$70,928, during May, against 2,519 tons, valued at \$38,388, in May preceding; and during the eleven months ending with May 50,415 tons, valued at \$823,010, were exported, against 30,358 tons, valued at \$477,896, exported during the corresponding months ending with May preceding.

VALUABLE BOOKS FOR GRAIN DEALERS.

The following standard works will be sent, postage paid, on receipt of prices given:

ROBINSON'S TELEGRAPH CIPHER.—The publishers have recently revised this excellent work, and we are now prepared to supply the trade. Cloth binding, \$1.50; leather.....\$2.00

WEIGH BOOKS.—Containing 125 perforated leaves with four weigh tickets and four stubs to each leaf, well printed upon good paper. The books are well bound. Copies will be mailed to any address for \$1.00

CLARK'S VEST-POCKET GRAIN TABLES.—A very useful and handy little book for grain buyers; to be used in reducing to bushels any quantity of grain or seeds up to 100,000 pounds. Size 2½ by 8½ inches, 16 pages. Leatherette.....75

KINGSLEY'S DIRECTORY is the only complete work containing the name and address of every firm engaged in the following lines of business: Milling, grain, flour and feed, hay and straw, butter and eggs, fruit and produce, malting, brewing, distilling and poultry. Over 500 pages, octavo, substantially bound in cloth. Indispensable to those who wish to reach the lines of business named above. Price.....\$3.50

TELEGRAPH CIPHER AND DIRECTORY TO NEW ENGLAND TRADE.—A new guide to carload buyers of grain throughout New England. A list of those engaged in the grain, feed and flour trade. Western grain shippers and millers wishing to do business in this territory will find this directory invaluable. The telegraph cipher has met with favor and is highly recommended by users. In fact the code part of the book is considered by many shippers superior to any other in use. It is modern and practical, a great money saver and will prevent mistakes. Nicely bound in leather,.....\$3.00

POUNDS TO BUSHELS.—These tables which show the number of bushels in any quantity from 20,000 to 70,000 pounds were compiled for the Chicago Grain Inspection Department. They are well printed on good paper and conveniently arranged for quickly finding the number of bushels in a carload. Each book contains ten leaves and each leaf is indexed at margin and printed on one side only. Each book is neatly bound in cloth. They will save clerks much labor and prevent errors in reduction. Price for "OATS," \$1.00; "BARLEY," \$1.00; "CORN AND RYE," \$1.00. The set.....\$2.50

ADAMS' CABLE CODEX.—This code is compiled especially for sending cablegrams and is used extensively in this country and abroad. The seventh edition, which is about to go to press, will contain 160 pages of cipher words, conveniently arranged. The code contains sentences covering and referring to buying and selling, condition of market, sterling money, United States money, business, financial matters, letters of credit, drafts, standing of firms and many sentences used by travelers. The cost of the code is a mere nothing compared with the saving which can be made on one message. Price, postpaid.....\$0.55

DAVIS GRAIN TABLES.—These tables give the value of any number of bushels of produce weighing 60 pounds to the bushel from 25 cents to \$1.25 per bushel, and the value of any produce weighing 32, 48 and 56 pounds to the bushel at 15 cents to \$1.50. The book also contains Davis' Dockage Table, which gives the amount to dock any load of wheat up to 600 bushels at 1½ to 5 pounds' dockage. The book contains 219 pages of tables, printed on good paper, with large type, and well bound in cloth. The book is a new publication, and the arrangement of the tables is much more convenient than in some of the old publications. Price.....\$1.25

CLARK'S GRAIN TABLES.—This work is published in several different forms, for use in different lines of business. In these tables pounds are reduced to bushels, so that a buyer can quickly determine the correct number of bushels in a load without doing any figuring. Their use effects a saving every day of more than time enough to pay for them. The edition intended principally for reducing team scale weights to bushels contains nine tables, and is bound in paper. Price 50 cents. This will be found invaluable to country buyers. A new edition, intended for shippers and commission merchants, reduces any quantity up to 64,000 pounds to bushels. It contains 16 tables, and is neatly bound in cloth. Price.....\$1.50

ROPFS COMMERCIAL CALCULATOR.—A small manual in compact form which contains a new system of useful and convenient commercial tables. Also a "Practical Arithmetic for Practical Purposes" in which is embodied the shortest and simplest rules and methods known. It includes in its contents a table giving the value of cattle, hogs, flour, etc., for any amount ranging from 3 to 20,000 pounds, and in price from \$2.50 to \$6.75 per 100 pounds. It contains a table which shows the equivalent of English market quotations from 1 to 100 shillings in U. S. money. It also shows the freight on grain per bushel from 1 to 50 cents per 100 pounds. The grain tables show the number of bushels and odd pounds in any quantity of any kind

of grain from 10 pounds to 100,000 pounds. The hay, straw and coal tables shows the value in tons of any amount ranging from 10 to 3,000 pounds at prices from 25 cents to \$18 per ton. The interest tables are very complete and give the interest for any amount for any time and for any rate per cent, ranging from 6 per cent. to 10. The millers' and farmers' exchange table gives the number of pounds of flour to be received from wheat ranging from 5 to 3,000 pounds and from 25 to 40 pounds to the bushel. Tables of money weights and measures are also included, and also the metric system. The book contains much other useful information. Price.....50

For any of the above, address
MITCHELL BROS. Co., 184 and 186 Dearborn street,
Chicago, Ill.

THE MARKETS.

We will be pleased to publish under this head short reviews of the conditions ruling in the different markets. Copy must reach us by the morning of the 14th of each month.

GRAIN REPORT OF J. & M. SCHWABACHER, LIMITED, New Orleans, La., July 11.—TIMOTHY HAY.—Choice New hay is in good demand at \$19.00 per ton; Strict Prime \$18.00. Old timothy also is firmer, viz.: Good Prime \$15.50; Prime \$14.00 per ton. PRAIRIE HAY.—In fair inquiry at \$6.50 per ton. CORN.—Scarce on spot, and jobbing sales being made at 60 cents per bushel. WHEAT BRAN.—Remains in large supply, and quiet at 75 cents per 100 pounds. WESTERN OATS.—Little called for now, and only Choice Black Mixed salable at 54 cents per bushel in a jobbing way. Texas oats take the place of White oats. TEXAS OATS.—Stocks are large, and buyers' views are readily met. Quite dry, bright and heavy stock 34 cents per bushel sacked. No sale for any other.

GRAIN REPORT OF L. NORMAN & Co., LIMITED, London, June 25.—Since our last report the improved tone and firmness in the grain trade then mentioned have been maintained, and the feeling seems to be gaining ground that wheat has seen bottom. White wheats have been held above buyer's views, but Australians sold up to 24.3 for handy cargo. Russian wheats have been in fair demand but the chief inquiry has been for La Platas, which have sold at 2. advance from lowest point touched. American wheats have been held too high and thereby interfered with business, but Red Winters found some buyers at 22.3 c. i. f. To-night, notwithstanding hot fine weather, the market is closing firm, but buyers are not anxious to go on at late rates. HARD MANITOBA.—Quiet but steadily held. A parcel sold during the week at 24.10½ c. i. f., while a parcel on re-sale sold at 24.6 c. i. f. To-day sellers ask 25.3 c. i. f. but 24 best bid. HARD DULUTH.—Firmly held. Parcels of No. 1 have sold from 24.6 to 25 c. i. f. Sellers to-day ask 25-6 but no buyers. BARLEY.—With reports of wet weather and damage in Russia, grinding barley has been firm and dearer. Malting qualities neglected. OATS.—Both on spot and for shipment are very quiet at last week's rates. PEAS.—In London prices have ruled firm owing to unfavorable weather. For shipment White Canadian are firm, owing to scarcity, and 25 c. i. f. asked, with buyers from 24.3 to 24.6 HAY.—With unfavorable weather for the home crop the market has ruled firm with fair inquiry. Canadian sound delivered London has been selling freely at 44, and buyers for shipment have been bidding £3 12 6 to £3 15 0 c. i. f. but few sellers. Reports speak well of a good grass crop this season, providing we have fine weather to secure same.

RICE IMPORTS AND EXPORTS.

According to the last report of the Bureau of Statistics rice aggregating 305,000 pounds, valued at \$11,380, was imported free of duty under reciprocity treaty with the Hawaiian Islands during May, against 300,000 pounds, valued at \$7,663, imported during May, 1893; and during the eleven months ending with May 7,727,083 pounds, valued at \$303,396, were imported, against 8,078,800 pounds, valued at \$334,747, imported during the corresponding months ending with May, 1893.

Of rice imported free of duty none was exported during May, against 250 pounds exported in May, 1893; and during the eleven months ending with May 8,830 pounds were exported, against 57,729 pounds, valued at \$1,601, exported during the corresponding months ending with May, 1893.

Dutiable rice aggregating 13,018,256 pounds, valued at \$190,685, was imported during May, against 5,872,394 pounds, valued at \$92,108, imported during May, 1893; and during the eleven months ending with May 64,668,326 pounds, valued at \$981,979, were imported, against 69,477,615 pounds, valued at \$1,196,697, imported during the eleven months ending with May, 1893. Of dutiable rice we exported 1,271,038 pounds, valued at \$21,080, during May, against 1,120,741 pounds, valued at \$21,832, in May, 1893; and during the eleven months ending with May 10,847,843 pounds, valued at \$191,267, were exported, against 9,917,236 pounds, valued at \$196,604, exported during the eleven months ending with May, 1893.

Rice flour, rice meal and broken rice aggregating 6,339,343 pounds, valued at \$92,223, was imported during May, against 5,261,450 pounds, valued at \$84,087, imported during May, 1893; and during the eleven months ending with May 49,250,311 pounds, valued at \$745,902, were imported, against 60,331,863 pounds, valued at \$1,094,660, imported during the corresponding months ending with May, 1893. Of imported rice flour, rice meal and broken rice there was none exported in May or in May, 1893. There was none exported during the eleven months ending with May, against 81,230 pounds, valued at \$1,700, exported during the corresponding months ending with May, 1893.

LOCATIONS FOR FACTORIES.

The name of the Chicago, Milwaukee & St. Paul Railway has long been identified with practical measures for the general upbuilding of its territory and the promotion of its commerce, hence manufacturers have an assurance that they will find themselves at home on the company's lines.

The Chicago, Milwaukee & St. Paul Railway Company owns and operates 6,150 miles (9,900 kilometers) of railway, exclusive of second track, connecting track or sidings. The eight states traversed by the lines of the company, Illinois, Wisconsin, Northern Michigan, Iowa, Missouri, Minnesota, South Dakota and North Dakota, possess, in addition to the advantages of raw material and proximity to markets, that which is the prime factor in the industrial success of a territory—a people who form one live and thriving community of business men, in whose midst it is safe and profitable to settle. Many towns on the line are prepared to treat very favorably with manufacturers who would locate in their vicinity.

Mines of coal, iron, copper, lead and zinc, forests of soft and hard wood, quarries, clays of all kinds, tan-bark, flax and other raw materials exist in its territory in addition to the vast agricultural resources.

A number of new factories have been induced to locate—largely through the instrumentality of this company—at towns on its lines. The central position of the states traversed by the Chicago, Milwaukee & St. Paul Railway makes it possible to command all the markets of the United States. The trend of manufacturing is westward. Nothing should be permitted to delay enterprising manufacturers from investigating. Confidential inquiries are treated as such. The information furnished a particular industry is reliable. Address *

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The *Millers' Gazette* says that wheat will run down a wood spout set at an angle of 35 degrees and down a tin spout at 30 degrees.



BUFF COCHIN EGGS FOR SALE.

Pure-bred Buff Cochin Eggs for sale. Address
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I want to buy one or two second-hand oat clippers, and have two second-hand boilers and engines for sale cheap.

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We will continue to sell 2-quart grain testers at \$7 cash with order. Every one guaranteed to be the Standard Winchester bushel. Over 100 were sold in December and January. We guarantee satisfaction and will refund money on return of tester if not satisfactory. Address

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Situation wanted by a thoroughly competent grain elevator man. Has had several years' experience in the elevator business. Am not afraid of work. Fully competent of taking charge where a reliable man is wanted. Best references as to honesty, sobriety and ability. If preferred would take an interest instead of salary. Address

T. B., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago.

DAVIS GRAIN TABLES.

The value of wheat or any grain at 60 pounds to the bushel, for any amount less than 100 bushels is shown without addition or multiplication, and for any amount over 100 and under 1,000 bushels, with but a single addition; at any price from 25 cents to \$1.25 per bushel. The value of bushels and pounds of other grain also is shown at 56, 48 and 32 pounds to the bushel at any price from 15 cents to \$1.50 per bushel. Price, postpaid, \$1.25. Address

E. D. DAVIS, 520 Nicollet Ave., Minneapolis, Minn.



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We have for sale a few country elevators and corn cribs situated on the line of the C. & N. W. R. R. and K. & N. R. R. in Kansas and Nebraska. Good grain points. Apply or address

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Elevator of a capacity of 8,000 bushels small grain, 4,000 bushels ear corn, fitted with two stands elevators, hopper scales, cleaner, roller feed mill, etc., for sale. Finest grain station in Central Illinois. Excellent competition. This is a money maker. *Terms cash.* No trades. Have several other good locations for sale. Address

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NO BETTER PROOF

Of the worth of the Demuth Check Scale Beams need be given than the fact that large elevator companies like the C. H. & D. and the Wabash of the Toledo, the Union Depot Elevator Company of Detroit, and the Armour of Chicago, have had the scale beams in their older elevators changed to check beams after having used the check beams in new elevators. If they had not proved to be valuable these companies and many others would hardly have incurred the expense of tearing their old beams out to have them replaced by check beams. Furnished only with Fairbank's Scales.

JENNINGS' CIPHER CODE.

Jennings' N. E. Telegraph Cipher contains many novel ideas, and is complete with instructions as to buying, selling, ordering, market advices, offers, bids, finance, bill lading, instructions, freight inquiries and advices, shipping inquiries and instructions, guaranteeing, etc., such as no other cipher contains. It will save you 25 to 50 per cent. more than any other code on your New England business; also giving names and addresses of 1,400 New England carload buyers. Send for circular issued March 1 giving names of firms up to date using the cipher and recommending it to the trade. Cost \$3, sent postpaid on receipt of price. Address

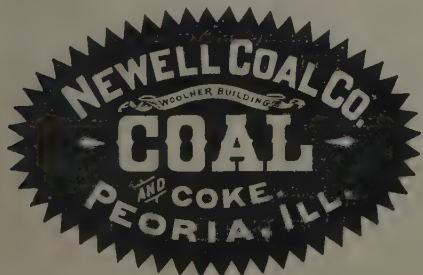
HENRY JENNINGS, 613 Chamber of Commerce, Boston, Mass.

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A complete elevator with annex, total capacity about 300,000 bushels. The two houses are connected by three 24-inch rubber belt conveyors in the top and three screw conveyors, 14 inches in diameter, in the bottom. They contain one good steam engine 14x24 inches, of about 75-horse power, one 52-inch boiler, with 54 3-inch flues, one large main rubber belt and main line of shafting, six 14-inch rubber elevator belts with 12-inch buckets, three of the best Clarke Steam Shovels, three 16-inch oak tan leather cross belts, five large hopper scales. All of the above belts and machinery are in the best of order and are for sale, together with the buildings to be removed in a reasonable time. Address

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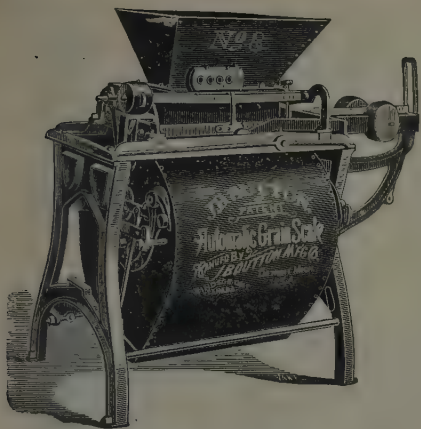
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Its cost is so small that it is practical for farm use.

Its pulley blocks are roller bushed and steel, reducing friction to a minimum.

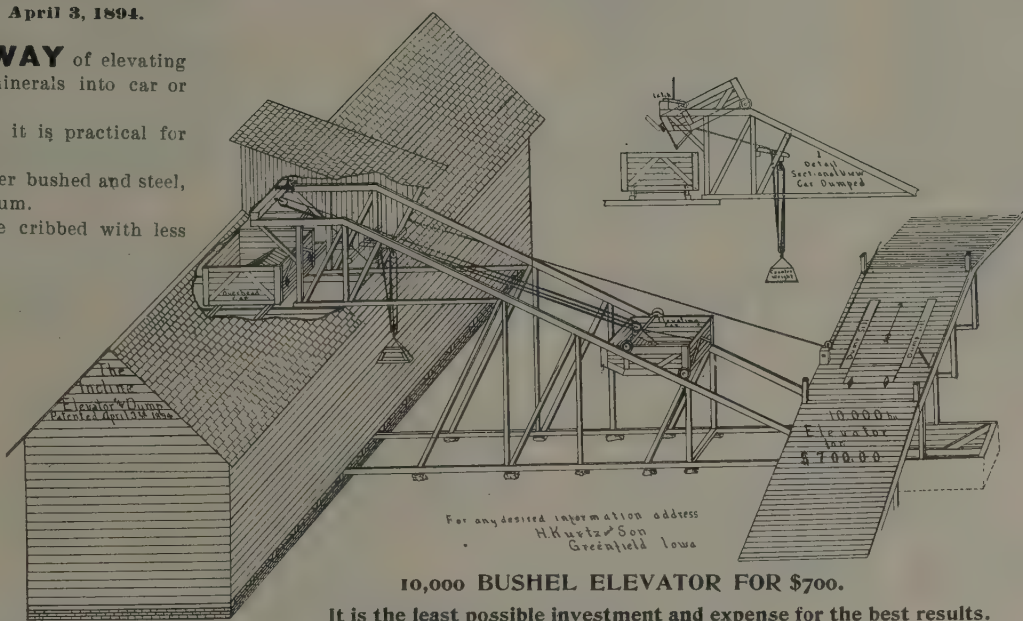
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A whole load is dumped at a time, making it practical to use an overhead car by which at the same cost you obtain more shipping bin capacity alone than all the storage and shipping bin capacity of a belt elevator.

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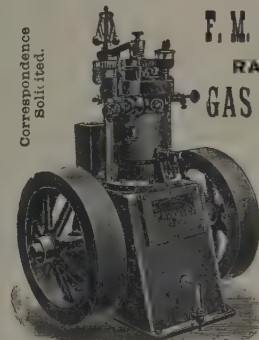
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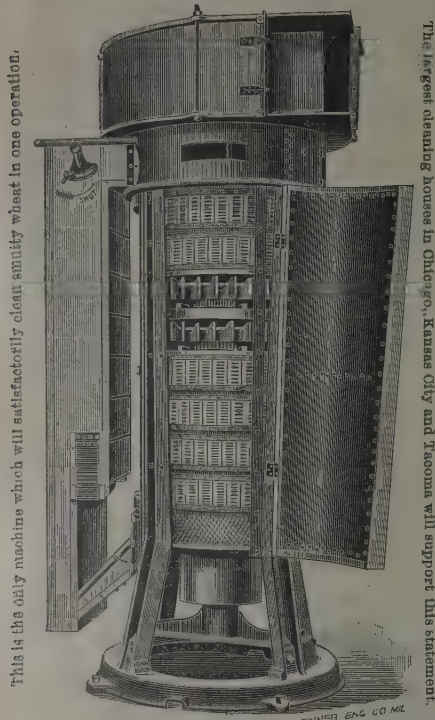
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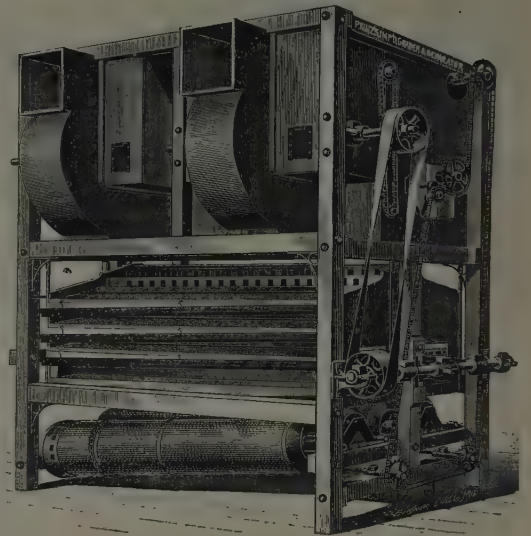
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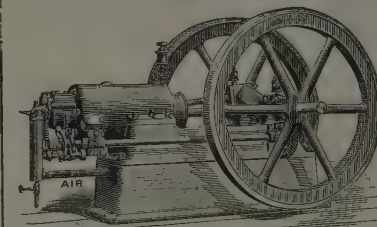
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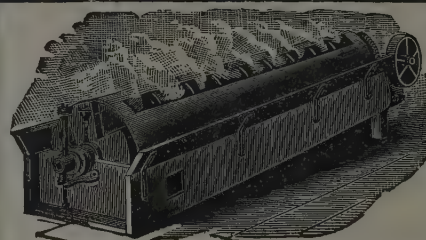
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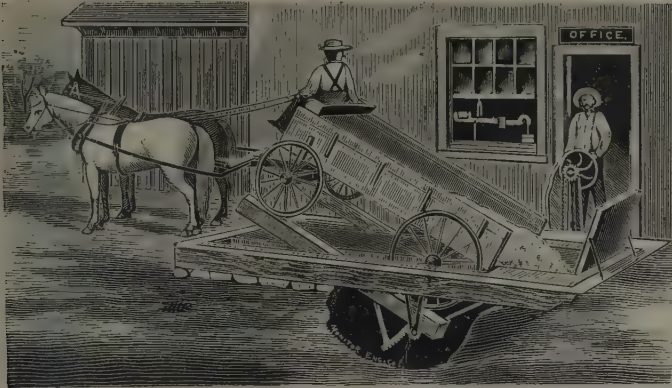
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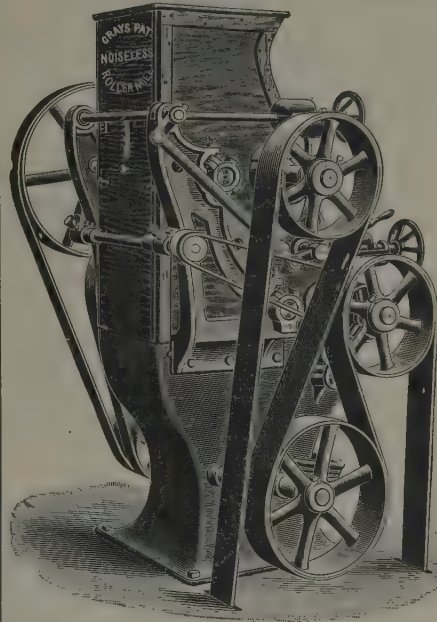
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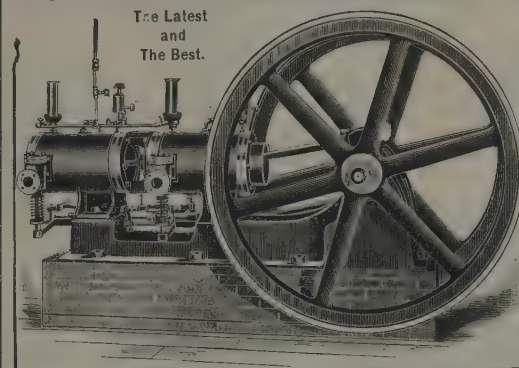
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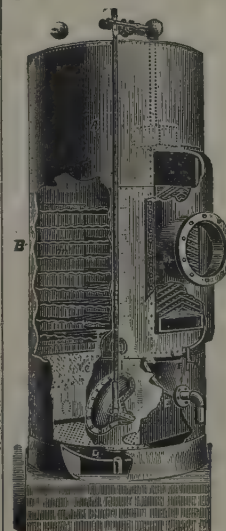
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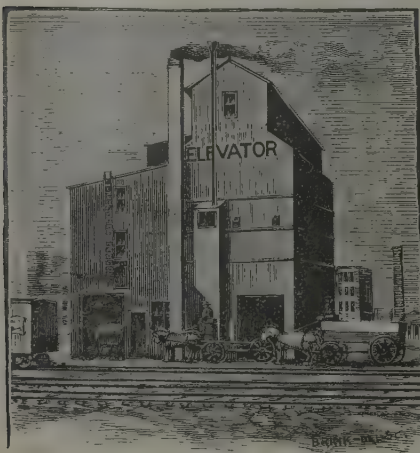
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1,750,000-bushel Elevator, with three Marine Elevating Towers, for the Eastern Elevator Co., at Buffalo, New York.
 500,000-bushel Storage and Cleaning Elevator for the Illinois Central Railroad Co., at New Orleans, Louisiana.
 Just contracted for 1,000,000-bushel Elevator for the Coatsworth Estate, Buffalo, New York.

RAILROAD BUILDINGS:

Shops and 40 Stall Round House for Baltimore & Ohio S. W. R. R. Co., at Chillicothe, Ohio.
 Freight Depot for the Louisville & Nashville R. R. Co., at St. Louis, Missouri.
 Railroad Shops for the C. C. & St. L. R. R. Co., at North Lindale, Ohio.
 Fifteen (15) Passenger Stations in Ohio for the Baltimore & Ohio S. W. R. R. Co.

MISCELLANEOUS:

Power House for the Cataract Construction Company, at Niagara Falls, New York.
 Barrel Warehouse for the Victoria Milling Company, at St. Louis, Missouri.
 Bonded Warehouse for the Ravenswood Distilling Company, at St. Louis, Missouri.
 Aluminum Works for Pittsburgh Reduction Company, at Niagara Falls, New York.

ESTABLISHED 1802.

WM. B. SCAIFE & SONS,

Offices, 119 First Avenue,

Manufacturers of

PITTSBURG, PA.



Corrugated Iron.

Sheet Iron and Copper Work.

Iron Buildings

of all Descriptions.

SEND ALL ORDERS DIRECT TO US.
YORK FOUNDRY & ENGINE CO.

YORK, NEB.

Mill and Elevator SuppliesMOTIVE POWER AND POWER TRANSMISSION,
ELEVATING AND CONVEYING MACHINERY.

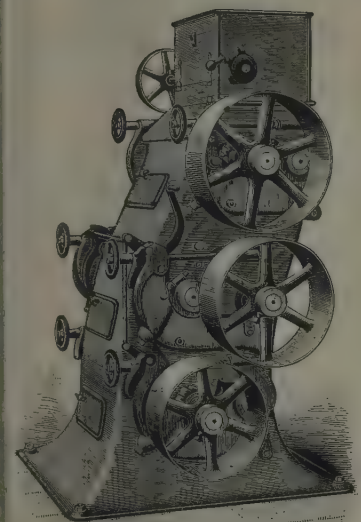
Write for Catalogue.

NORDYKE & MARMON CO., Indianapolis, Ind.,

Flour, Corn and Elevator Machinery,

QUALITY TO SUIT THE MOST EXACTING.

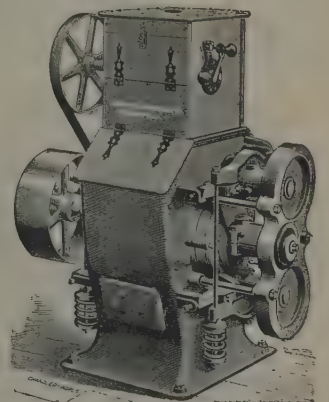
PRICES TO SUIT THE TIMES.



Three Pair High Six Roller Mill.

*Corn Shellers,
 Grain Cleaners,
 Flour and Bran Packers,
 Flour Feeders and Mixers,
 Portable Buhr Mills,
 Hominy Mills,
 Wheat Heaters,
 Scales,
 Shafting,
 Pulleys,*

*Hangers,
 Boxes,
 Gearing,
 Belting,
 Steel Conveyors,
 Wood Conveyors,
 Link Belt,
 Sprocket Wheels,
 Engines and Boilers,
 Water Wheels,*

Elevator Supplies.

Three-Roll Two-Break Corn and Feed Mill.

TEN SIZES and STYLES of ROLLER, CORN and FEED MILLS.

No doubt about the volume of our voice if price and merit talk, and what we say will be interesting if you intend to buy.

Write Us Saying What You Want.**NORDYKE & MARMON CO., - INDIANAPOLIS, IND.****DUST! DUST!**

Gibbs' Patent Dust Protector protects the nose and mouth from inhalations of poisonous dust; invaluable in mills, elevators and every industry where dust is troublesome. Perfect protection with perfect ventilation. Nickel-plated protectors \$1, postpaid. Circulars free. Agents wanted.

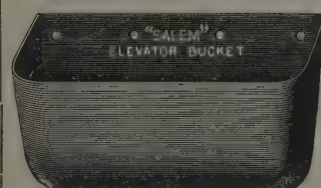
Gibbs Respirator Co.,
 30-36 La Salle Street, - CHICAGO.

American Elevator and Grain Trade.

—PUBLISHED BY—

MITCHELL BROS CO., CHICAGO.

\$1.00 PER ANNUM.

NEVER A PEER

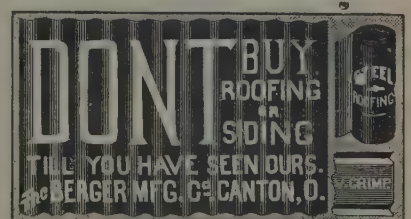
The Salem Bucket has had imitators, but most ever claimed by competing buckets is that they "are as good as the Salem."

We fixed the standard to which others aspired, but the Salem is now, as it always has been, incomparably the

BEST BUCKET MADE.

The BEST is what you want. It is the cheapest and most satisfactory in the end. Besides, the Salem is sold as low as other buckets.

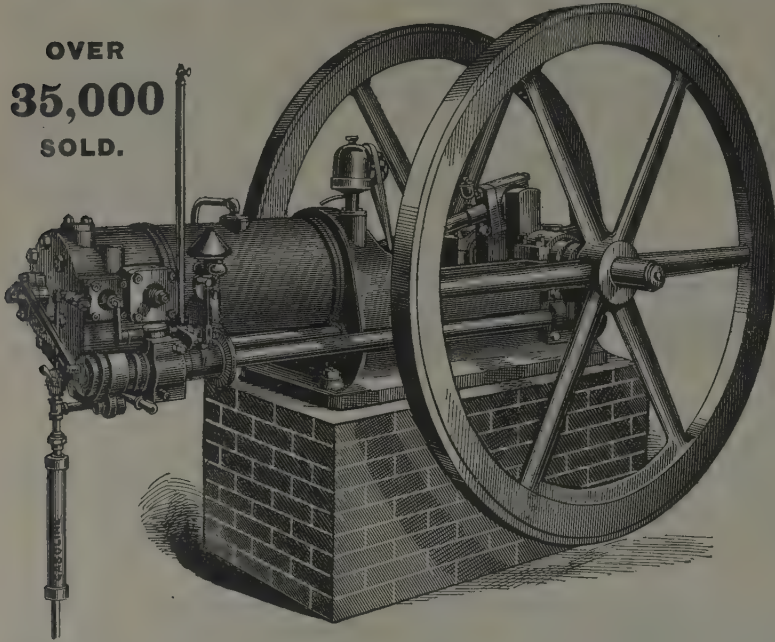
ALL KINDS OF SHEET AND PLATE METAL WORK.
W. J. CLARK & CO., SALEM, OHIO, U. S. A.



Subscribe for the American Elevator and Grain Trade and the American Miller; both one year \$2.50. Address MITCHELL BROS. CO., Chicago.

The Modern Wonder.

OVER
35,000
SOLD.



OTTO GASOLINE ENGINE

WORKING WITHOUT BOILER, STEAM, ENGINEER,
COAL, ASHES, OR DANGER.

2 Medals and 2 Diplomas at World's Columbian Exposition, making over 150 Medals and Diplomas in all.

Capacity of Works: 800 Engines per Year.
Sizes: 2 to 60 Horse-Power.

Best and Cheapest Power for GRAIN ELEVATORS,
FLOUR AND FEED MILLS, CONVEYORS, ETC.

OTTO GAS ENGINE WORKS,

OFFICES:
Thirty-third and Walnut Sts., Philadelphia.
245 Lake St., Chicago.
31 S. Penna. St., Indianapolis.
107 S. 14th St., Omaha.

THE AMERICAN BELTING COMPANY,

(INCORPORATED)

H. N. GREEN, President and General Manager.

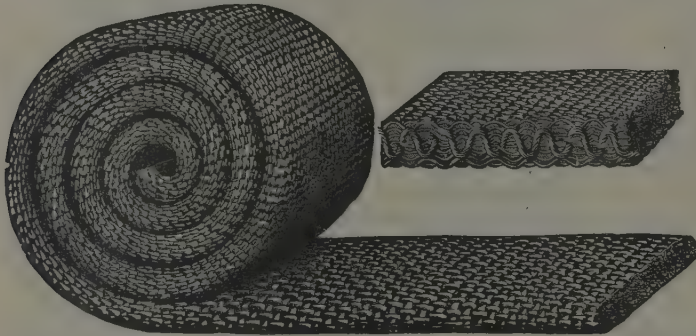
MANUFACTURERS OF

THE MADDUX COTTON AND WIRE BELTING,

TO TAKE THE PLACE OF LEATHER BELTING.

MADE OF CABLE STEEL WIRE and

COTTON WOVEN SOLID TOGETHER.



Is absolutely the strongest, toughest, most powerful, flexible, durable and lasting belting made, without any exception whatever. It is stronger, tougher, more durable, and will transmit more power than the best oak-tanned double leather belting made. It will not stretch or slip even when wet. It is water-proof, and is not affected any by water, steam dampness, moisture, heat dryness, oils, grease, acids, chemicals, dust, changes of climate or weather. It will not mildew, crack, or get hard or stiff. Does not require any grease or other belt compositions, nor special care, but will always keep soft and flexible, and in good condition for use. It is cheaper in price than single leather belting, and 50 to 75 per cent cheaper than double leather belting. It is absolutely superior to all other kinds of belting for use in flour mills and other cereal mills, and all other places where belting of any kind is used. Is guaranteed not to be affected or injured any by flour dust or mill dust of any kind, or by heat or dryness. This belting is guaranteed to be all that is said and claimed for it in this advertisement and to prove so in use. It will be sent to responsible parties on trial and approval, and if it does not prove to be entirely satisfactory and a good belting, it can be returned. For circulars, price lists, etc., address

H. N. GREEN, 102 Vesey Street, New York City.

ELEVATOR HORSE POWERS.



*Cheapest,
Most Efficient
and Durable Power
For an Elevator.*

PERFECTLY GOVERNED.

A Steady Motion.

No Skilled Help Required to Operate

For Catalogue, Address

MORTON MFG. CO.,

MUSKEGON HEIGHTS, MICH.
Or E. H. PEASE MFG. CO.,
RACINE, WIS., Agents.

HARD-MOUTHED HORSES

AND PULLERS CONTROLLED WITH ABSOLUTE EASE.
RUNAWAYS IMPOSSIBLE.

This statement is now repeated by thousands who have purchased

BRITT'S AUTOMATIC SAFETY BIT.

SAFETY
GUARANTEED

This Bit, by an automatic device, closes the horse's nostrils.

HE CANNOT BREATHE, AND MUST STOP.



SAFETY FROM RUNAWAYS

ABSOLUTELY GUARANTEED WITH THIS BIT

Any horse is liable to run, and should be driven with it. By its use ladies and children drive horses men could not hold with the old style bits.

Send for illustrated pamphlet containing testimonials from all parts of the world, and earnest and candid expressions about the BRITT AUTOMATIC SAFETY BIT and its resistless but harmless and humane power in subduing the most vicious horses and controlling the most stubborn pullers and chronic runaways.

The only bit in the world that is endorsed, advocated, used and sold by the Society for the Prevention of Cruelty to Animals, *The Highest Authority.*

DR. L. P. BRITT, 37 COLLEGE PLACE, NEW YORK.



GRAIN ELEVATOR MACHINERY AND SUPPLIES

OUR SPECIALTY

Is to Furnish Every Description of

MACHINERY OR SUPPLIES

Required for the Equipment or Repairing of

GRAIN ELEVATORS

Such as:

**"SWEEP" and "TREAD" HORSE POWERS,
GAS ENGINES, OIL ENGINES, STEAM ENGINES.**

SHAFTING, PULLEYS, HANGERS,
PILLOW-BLOCKS, CLUTCHES, COUPLINGS,
GEARS, SPROCKETS, SET COLLARS,
TAKE-UP BOXES, CRANE SPOUTS.
LEATHER, RUBBER, COTTON AND LINK BELTING.
"FLEXIBLE" AND "SWIVEL" GRAIN SPOUTS.
ELEVATOR BOOTS, BUCKETS AND BOLTS.

"SPIRAL" AND "BELT" CONVEYORS,
"PLATFORM," "DUMP" AND "HOPPER" SCALES,
GRAIN SCOOPS, AND POWER GRAIN SHOVELS.

—ALL SIZES OF—

FARM AND WAREHOUSE FANNING MILLS.

GRAIN TESTERS, SEED TESTERS,
PERFORATED METALS, WIRE CLOTH,

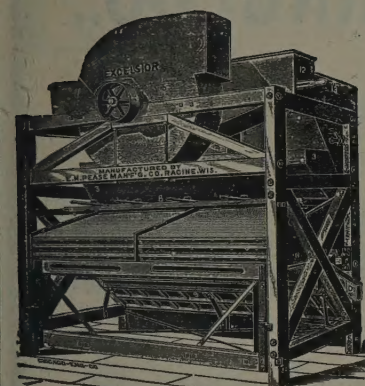
**Power Car Pullers, Oat Clippers, Dustless
Receiving Separators,**

POLISHERS, SEPARATORS, GRADERS,
FLAX REELS AND SPECIAL FLAX MILLS.

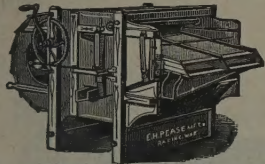
"OVERHEAD," "SWEEP" AND "TREAD" HORSE POWERS,
BAG-TRUCKS, WAREHOUSE TRUCKS, ETC.

FAMOUS HAND OR POWER CLEANERS COUNTRY ELEVATORS.

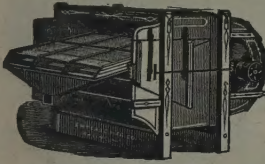
The Successful Combination of 3 MACHINES IN ONE.



EXCELSIOR DUSTLESS ELEVATOR SEPARATOR,
Cleans, Separates and Grades Perfectly.
HAS NO SUPERIOR IN THE WORLD.



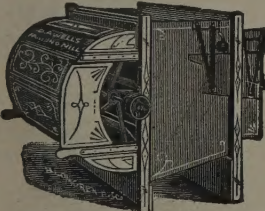
Pease Side Shake Mill for Warehouses.



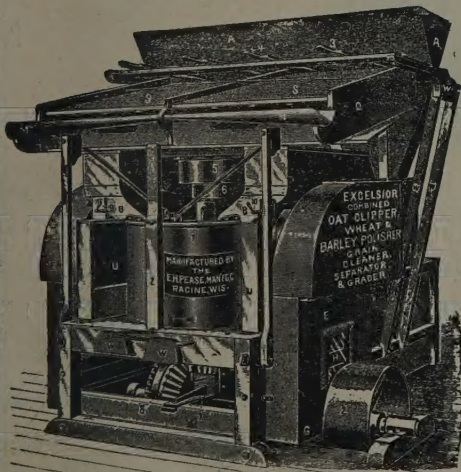
Pease End Shake Mill for Warehouses.



Pease Dustless Separator for Warehouses and Mills.



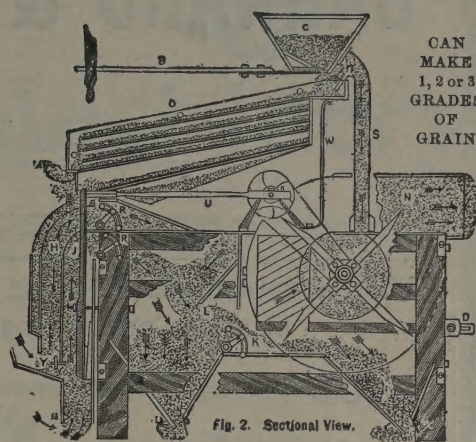
"Wells" Warehouse Mill.—Extra Large Capacity.



EXCELSIOR COMBINED

Oat Clipper, Polisher, Separator, Grader and General Dustless Elevator Separator.

This Machine has no Legitimate Rival in the World.
Send for particulars.

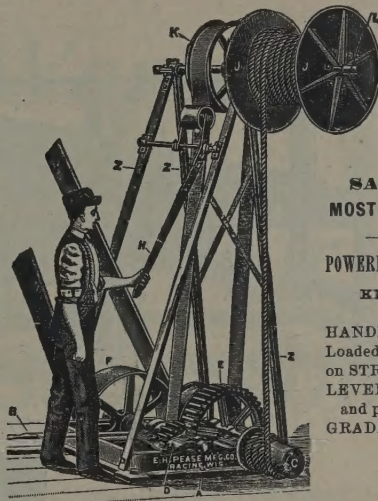


CAN
MAKE
1, 2 or 3
GRADES
OF
GRAIN

Fig. 2. Sectional View.

EXCELSIOR SEPARATOR AND GRADER.

The Finest Wheat or Barley Machine on Earth



**SAFEST,
MOST DURABLE
—AND—
POWERFUL PULLER
KNOWN.**

HANDLES 1 to 20
Loaded Cars at once
on STRAIGHT and
LEVEL TRACK
and pro-rata on
GRADES and
CURVES

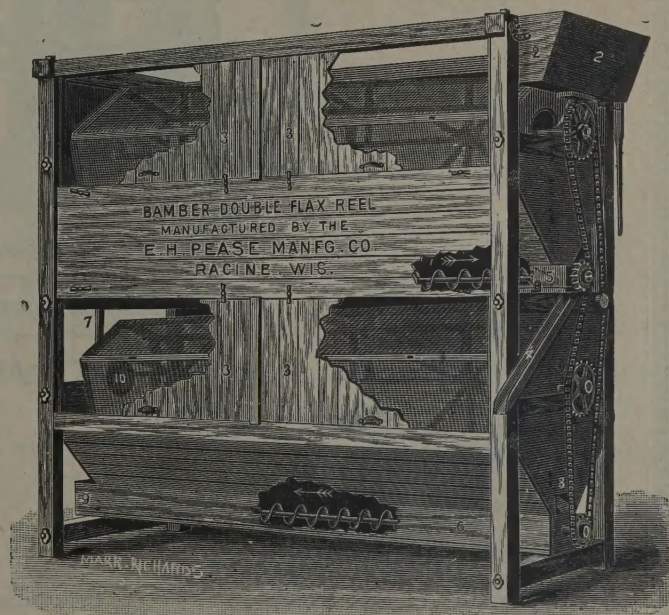
"HERCULES" POWER CAR PULLER.

PEASE

SPECIAL
FLAX MILLS
ARE
SUPERIOR
TO ALL OTHERS.

OUR FLAX REELS

Are Adopted and in more General Use by
THE MOST EXTENSIVE FLAX HANDLERS
Throughout the United States, than any similar Machines made



Made with 1, 2 or 4 Reels in one Chest, and with or without
Scalping Shoe.

Reels of any desired style or dimensions made to order.

WE FULLY WARRANT
THE
SUPERIORITY

OF THE
**MATERIALS USED,
THE CONSTRUCTION and
Operating Qualities**

OF ALL OUR

MACHINERY.

ADDRESS

—ALL—

LETTERS CAREFULLY

—TO—

E. H. PEASE MFG. CO., RACINE, WIS., U. S. A.

BRANCH OFFICE, No. 6 CORN EXCHANGE, MINNEAPOLIS, MINN.

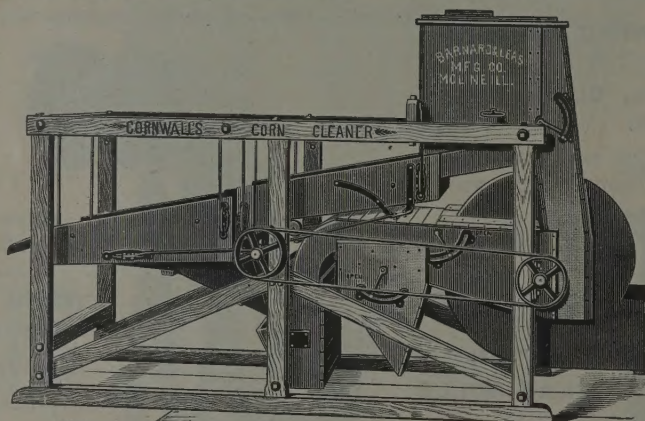
BARNARD & LEAS MANUFACTURING CO., MOLINE, ILLINOIS.

Sole Manufacturers of Barnard's Grain Cleaning Machinery.

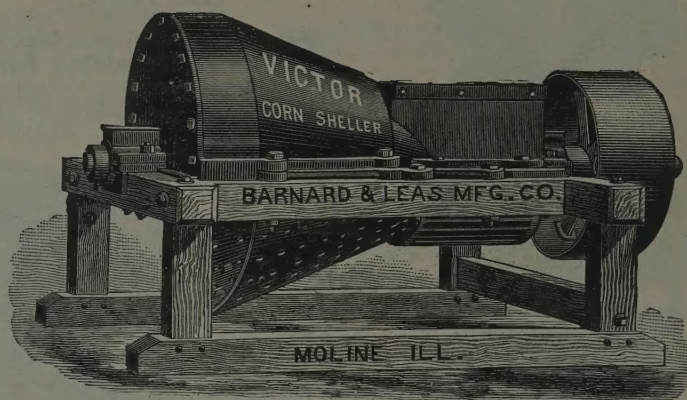
See these machines at work before purchasing.

The Barnard Grain Cleaning Machinery is built in a greater number of sizes, in a greater number of styles, and for a greater variety of uses in the mill and elevator than any other.

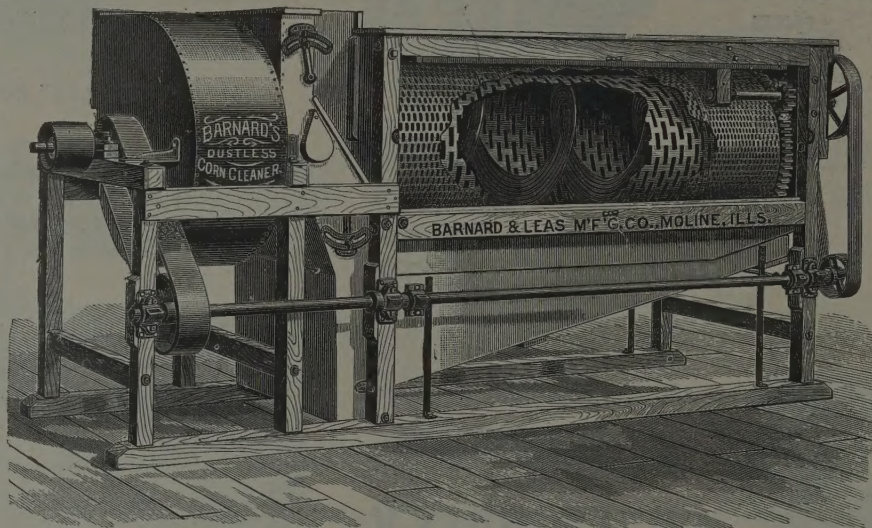
105 Barnard Cleaners were sold during the month of June for mills to be built and remodeled by us, for Elevators and Warehouses and incidental sales.



Cornwall Corn Cleaner.



Corn Sheller.



Double Screen Corn Cleaner.

SEND FOR SPECIAL CATALOGUE OF ELEVATOR MACHINERY.

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CHAS. E. MANOR, P. O. Box 5, Stanleyton, Page Co., Va.,
General Agent for Virginia, W. Virginia, Maryland
and North Carolina.
WM. R. DELL & SON, London, England.

EUREKA



Grain Cleaning Machinery

THE GREATEST VARIETY
THE LARGEST CAPACITY
THE LARGEST NUMBER AT WORK } IN THE WORLD.

THE NEW IMPROVED *Eureka*

*BY Far the
Best Separator
on the Market.*

We make every part of this machine
under our own

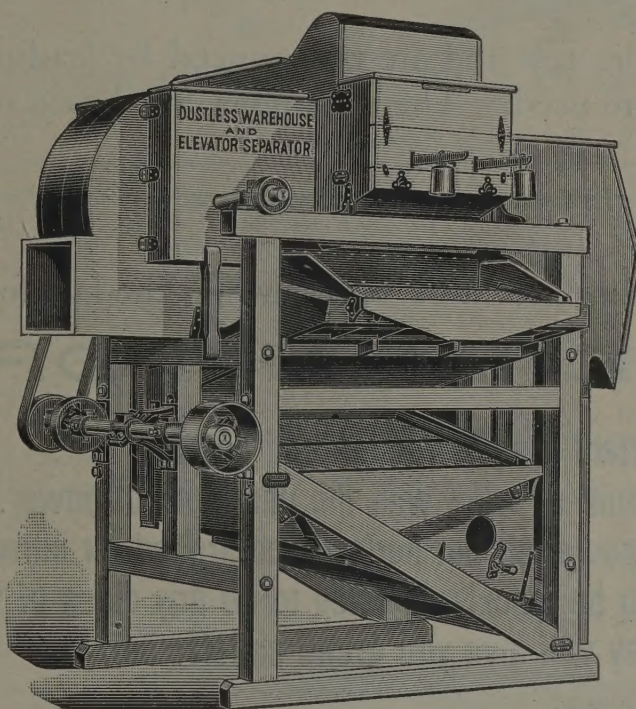
PERSONAL SUPERVISION,

and are thus in a position to guarantee
it as to material and workmanship.

Will positively do more and better
work than any other Separator.

Wide Suction.
Perfect Separation under Control.
Interchangeable Screens.
Large Cockle Screen.
Automatic Feed.

Will run perfectly smooth and quiet.
Has large capacity.



*Warehouse
and
Elevator
Separator,*

WITH LATERAL-SHAKE
MOVEMENT
OF SCREENS.

Conceded by all to be the best arrangement for
ridding grain of impurities. Has Counter balances
and new Pitman Drive.

WILL SHIP ONE ON 30 DAYS' TRIAL.

READ WHAT USERS SAY OF THEM:

CLYDE, N. Y., May 21, 1894.

MR. S. HOWES, Silver Creek, N. Y.

DEAR SIR:—I enclose you check for \$..... to
balance account for the Eureka Warehouse Separ-
ator. I take pleasure in informing you that I am
much pleased with the machine, which has done
good work from the start.

Yours truly, GEO. B. GREENWAY.

YORK, PA., July 18, 1894.

MR. S. HOWES, Silver Creek, N. Y.

DEAR SIR:—We are in receipt of your favor of
the 16th. The Warehouse and Elevator Separator
sold us by you is giving us great satisfaction. We
are not in the habit of recommending any ma-
chines, but must speak well of this one.

Yours truly, P. A. & S. SMALL.

Address **S. HOWES, Silver Creek, New York,**
SOLE BUILDER.

GRAIN CLEANERS.

IF YOU ARE IN NEED OF A PERFECT GRAIN
CLEANER, WE OFFER YOU

The Monitor Separator

These machines have stood the test and are pronounced by leading elevator operators superior to anything heretofore used. Their opinions are based on actual experience.

Nearly all of the leading cleaning elevators built during the last four years have adopted

THE MONITOR

They are simple, yet perfect in construction and durable.

They do the maximum of work with the minimum of power.

They have a powerful, but perfectly controlled air current.

They can be quickly adjusted to do any class of work desired.

They will give you grand satisfaction.

They are modern machines, and you will find them in all of the modern cleaning houses.
If you are interested in this line we ask you to investigate.

BARLEY.

We are making a special **BARLEY CLEANER**
that stands at the head.

FLAX.

Our **Monitor Flax Cleaner** will give you good
results. Close work with large capacity.

Huntley, Cranson & Hammond

SILVER CREEK, N. Y.

B. F. RYER, GENERAL AGENT, 799 MONROE STREET, CHICAGO.